Leong Hup International (LHIB MK) **A Pure Poultry Play**

An integrated poultry player with regional presence

Leong Hup provides exposure to one of the largest and most regionally diversified poultry producers in ASEAN, with a presence in Malaysia, Singapore, Indonesia, Vietnam and the Philippines. Its 2017 market share of annual feedmill production was 10.5% in Malaysia, 5.5% in Indonesia and 4.0% in Vietnam. As for livestock production, Leong Hup is the largest poultry producer in Malaysia. It also ranks among the top three poultry producers in Indonesia and Vietnam while in Singapore, it commands the largest market share of slaughtered poultry. We initiate coverage with a BUY and a TP of MYR1.37.

Resilience and growth through diversity

Leong Hup's fully integrated operations lend to operational efficiencies through economies of scale, product diversification and resilience through economic cycles. Its regional diversity, meanwhile, offers it much opportunity for organic growth outside Malaysia, particularly in under-penetrated markets such as Vietnam and the Philippines. Moreover, its operational and geographical diversity contributes to earnings stability and scalability as well as a leading edge in an industry with significant barriers to entry.

3-year net profit CAGR of 14%

We estimate a 3-year (FY18-FY21E) core net profit CAGR of 14%, driven by a 3-year revenue CAGR of 7% and an expansion in operating profit margin to 9.4% in FY21E from 8% in FY18. We forecast feedmill revenue to expand at a 3-year CAGR of 13% driven primarily by capacity expansion and higher utilization rates, while livestock revenue is expected to grow at a steady pace of 3% p.a. on the back of stable consumption growth.

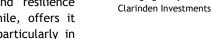
Target price of MYR1.37

Our TP of MYR1.37 pegs its earnings to the 2020 weighted average PER of its regional peers of 17x. Leong Hup's 2-year (FY18-FY20E) net profit CAGR of 14.3% compares favourably against its regional peer average of 13.4%, as does its PEG of just 1x at the current share price of MYR1.04, relative to its peer average of 1.4x.

FYE Dec (MYR m)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	5,501	5,747	6,137	6,600	7,094
EBITDA	583	655	778	844	919
Core net profit	193	225	260	294	331
Core EPS (sen)	5.3	6.2	7.1	8.0	9.1
Core EPS growth (%)	5.5	16.8	15.7	12.8	12.6
Net DPS (sen)	0.0	0.0	2.1	2.4	2.7
Core P/E (x)	na	na	14.6	12.9	11.5
P/BV (x)	na	na	2.2	1.9	1.7
Net dividend yield (%)	na	na	2.1	2.3	2.6
ROAE (%)	15.4	15.0	17.0	15.8	15.9
ROAA (%)	4.4	4.8	5.0	5.0	5.1
EV/EBITDA (x)	10.2	9.4	7.8	7.3	6.8
Net gearing (%) (incl perps)	103.0	108.3	75.1	67.6	58.3
Consensus net profit	-	-	247	272	308
MKE vs. Consensus (%)	-	-	5.5	8.1	7.4

Desmond Ch'ng, ACA desmond.chng@mayl (603) 2297 8680

Jade Tam



Price Performance

BUY

Share Price

Statistics

Free float (%)

Issued shares (m)

Market capitalisation

Major shareholders:

Emerging Glory

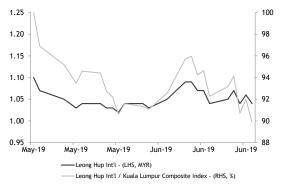
12m Price Target

Company Description

52w high/low (MYR)

3m avg turnover (USDm)

Vietnam and the Philippines



	-1M	-3M	-12M
Absolute (%)	(1)	na	na
Relative to index (%)	(6)	na	na
Source: FactSet			

/bank-ib.com	jade.tam@maybank-ib.com
	(603) 2297 8687

MYR 1.04

The company is an integrated poultry player with

operations across Malaysia, Singapore, Indonesia,

MYR 1.37 (+32%)

na/na

5.1

27.4

3,650

52 8%

9.0%

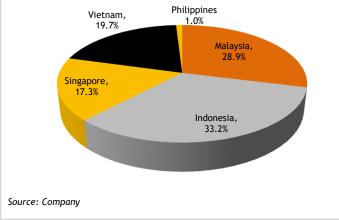
MYR3.8B

USD915M

Value Proposition

- Leong Hup International Bhd (Leong Hup) is one of the largest, fully integrated producers of poultry, egg and livestock feeds in ASEAN, with a presence in Malaysia, Singapore, Indonesia, Vietnam and the Philippines.
- Its 2017 market share of annual production of livestock feed was estimated to be 10.5% in Malaysia, 5.5% in Indonesia and 4.0% in Vietnam.
- It is the largest poultry producer in Malaysia with a domestic market share of 27% in 2017. It also ranks among the top three poultry producers in Indonesia and Vietnam while in Singapore, it commands the largest market share of slaughtered poultry.

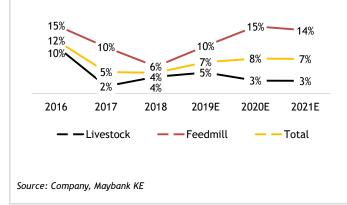
FY18 revenue breakdown



Financial Metrics

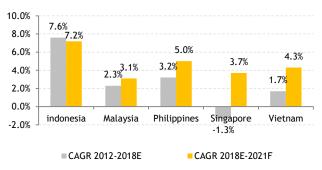
- We forecast a 3-year revenue CAGR of 7%, driven by a 3-year feedmill revenue CAGR of 13% and a more moderate 3-year livestock revenue CAGR of 3%.
- We expect the group's EBIT margin to expand to 9.4% in FY21E from 8.0% in FY18 on the back of higher revenue growth, economies of scale and greater process integration.
- We expect capex to average MYR400m-MYR410m per annum between FY19E and FY21E.

Revenue growth by segment (FY16-FY21E)



Industry Drivers

Poultry meat consumption CAGR by country



Source: Frost & Sullivan

- The cumulative population base of the 5 countries of 505m people as at end-2018 is projected by the International Monetary Fund to expand at a 3-year CAGR of 1.4%, to 525.9m in 2021.
- Based on Frost & Sullivan's industry report, ASEAN's disposable income per capita is projected to expand at a 2-year CAGR (2018E-2020F) of 3.7% and this compares against rates of just about 1.5% for the US, 1.4% for the EU and 0.3% for Japan
- Frost & Sullivan projects a 3-year (2018E-2021F) poultry consumption CAGR of 3.7% for Singapore, 3.1% for Malaysia, 5.0% for the Philippines, 4.3% for Vietnam, and 7.2% for Indonesia.

Swing Factors

Upside

- Stronger-than-expected consumer demand or disposable income growth, which would lead to increased poultry consumption.
- Improved selling prices brought on by demand/supply imbalances in other meat categories.
- Faster-than-expected capacity expansion/utilization, especially for feedmill, which could lead to increased feedmill market share.

Downside

- Interruptions in breeding stock supply would cause delays to its entire supply chain.
- Any livestock disease outbreak would significantly impact supply.
- Raw material price volatility, especially for corn and soybean meal, which could lead to escalating costs.

Contents

	Page
Investment thesis	4
From backyard to regional	5
A family business	7
Current operations	9
 The feedmill business 	10
 The livestock business 	11
 Raw materials 	15
Leong Hup's competitive edge	16
 A large consumer base 	16
 Fully integrated operations 	18
 Stability and scalability through diversity 	19
 An established track record 	19
The growth engines	20
 Organic demand growth 	20
 Capacity expansion plans 	21
 The push up the value chain 	21
The competitive landscape in Malaysia	22
A comparison of listed regional peers	25
A review of 1Q19 results	29
Looking forward	31
Valuations	37
Key risk factors	38
Financials	39
Appendix 1: Corporate structure	41
Appendix 2: Board of Directors	42
Appendix 3: Key senior management	44

Investment thesis

Introduction

Leong Hup group is not only the largest poultry producer in Malaysia, but it is also, in our opinion, one of the most vertically and geographically diversified. Its activities comprise both upstream and downstream operations that range from feedmill production to the rearing of day-old chicks (DOCs) and Broiler chickens, egg layering and processed chicken products. Geographically, the group has since expanded its reach into the Singapore, Indonesia, Vietnam and Philippine markets. It is with this expansion that Leong Hup today is one of the largest fully integrated producers of poultry, eggs and livestock feeds in Southeast Asia.

Competitive edge

Leong Hup's fully integrated operations lend to operational efficiencies through economies of scale, product diversification and resilience through economic cycles. Its regional diversity, meanwhile, offers it much opportunity for organic growth outside Malaysia, particularly in under-penetrated markets such as Vietnam and the Philippines. Moreover, we believe that its operational and geographical diversity contributes to earnings stability and scalability as well as a leading edge in an industry with significant barriers to entry. Finally, it helps that the group has a long-established track record in the business and a single focus on the production of poultry.

The earnings growth drivers

We forecast a 3-year (FY18-FY21E) core net profit CAGR of 14%, driven principally by a) capacity expansion and increased investments into underpenetrated markets such as Vietnam and the Philippines, b) organic growth in demand for chicken and eggs in the five ASEAN countries that Leong Hup operates in, driven by population growth and income expansion, and c) the push up the value chain through greater integration of downstream and upstream activities as more feedmills are built, as well as the shift in production towards owned rather than contract farms.

Risk factors

Risk factors include a) possible disruptions to activities if proper certification requirements for its farms and hatchers in both Malaysia and Indonesia are not met; b) interruptions in its breeding stock supply from global suppliers such as Cobb-Vantress and Aviagen; c) an outbreak of livestock disease (eg. Avian Influenza) in any of Leong Hup's operating countries, which could be detrimental to the group's profitability; d) raw material (primarily corn and soybean meal) price volatility; and e) dependence on foreign workers.

Valuations

We value Leong Hup at MYR1.37, pegging its earnings to the 2020 weighted average PER of its regional peers of 17x. Leong Hup's 2-year (FY18-FY20E) net profit CAGR of 15.3% compares favourably against its regional peer average of 13.4%, as does its PEG of just 1x at the current share price of MYR1.04, relative to its peer average of $1.4x_{-}$

From backyard to regional

Backyard operations

Leong Hup has come a long way from the days of just rearing Broiler chickens in the founding family's backyard in Muar, Johor. This was back in the 1960s and it was in 1972 that they opened up their first breeder farm. Leong Hup was established in 1978. Over the years, the operations flourished and the family business expanded to include more Broiler and breeder farms, feedmills, slaughtering plants and food processing plants.

Was listed before

The expansion in business culminated in the listing of Leong Hup Holdings (LH Holdings) on the Main Board of the KLSE on 29 Oct 1990. This was followed by the listing of other entities within the group, over the following years:

Companies previously listed

Company	Listing	Listing	Principal activity
	date	On	
Emivest	23.1.2002	Bursa Malaysia	Feedmill operations
Malindo Feedmill	10.2.2006	Indo Stock Exchange	Feedmill operations
Teo Seng Capital	29.10.2008	Bursa Malaysia	Production and distribution of eggs & animal feeds

Source: Company

Leong Hup Holdings and Emivest privatised

Today, Malindo Feedmill (MAIN IJ, Not Rated) and Teo Seng Capital (TSCB MK, Not Rated) are still listed on their respective Stock Exchanges.

On 18 Nov 2010, Leong Hup's major shareholder, Emerging Glory, made separate offers to privatize LH Holdings and Emivest, primarily on the grounds that both companies were trading below their respective net tangible asset value. Both companies were subsequently privatized.

Privatization terms in 2010

Company	Offer price	Premium to	Implied	Total consideration
	(MYR/shr)	closing	PER (x)	(MYR'm)
LH Holdings	1.80	6.5%	10.3	318.7
Emivest	0.90	9.8%	5.5	108.0

Has been expanding since then

Since privatization, the group has been in an expansion/transformation mode. It has since:

- Grown its Vietnam operations (first breeder farm was established in 2007) into one of the largest integrated poultry producers in Vietnam;
- Made inroads into the Philippines market with the commencement of its first Breeder farm operations in 2016;
- Acquired in FY17, the remaining 49% stake in Singapore-based Lee Say Poultry Industrial, which is involved in the slaughtering, processing and sale of fresh and frozen poultry.
- Acquired in FY17, the remaining 25% stake in Singapore-based ES Food Industries, which moves Leong Hup downstream to the processed food market. This includes ready-to-eat and ready-to-cook products.

Since 2010, the group has invested much in expanding its production capacity:

- In FY10, annual feedmill capacity was just 432k MT. This has since expanded more than six-fold to 2.7m MT in FY17.
- Leong Hup's production volume in FYE Mar 2011 was approximately 130.4m Broiler DOCs, 47.1m Broiler chickens and 635m table eggs. In FY17, Leong Hup's production of Broiler DOCs, Broiler chickens and eggs was about 456.1m, 99.1m and 1.74b, this representing an increase of about 250%, 111% and 174% respectively.

The IPO

Leong Hup was listed on 16 May 2019 on Bursa Malaysia' Main Market at an IPO price of MYR1.10. Its IPO comprised an institutional and a retail offering of up to 937.5m shares, representing up to 25.7% of its enlarged share capital. The institutional offering was of up to 687.5m Offer Shares and 152m Issue Shares, while the retail offering was of 98m Issue Shares.

At the listing price of MYR1.10, the IPO raised a total of MYR1.03b - MYR756m from the Offer Shares and MYR275m from the Issue Shares.

There is a 6-month moratorium from the date of listing, on Emerging Glory (52.8% shareholding), Lau Joo Hong (0.68%) and Lau Joo Han (1.89%).

Proceeds to the group of MYR275m from the Issue Shares will be utilized as follows:

Use of proceeds

	(MYR'm)	%
Capex	207.7	75.5%
Working capital	33.0	12.0%
IPO expenses	34.3	12.5%
Total	275.0	100.0%

A family business

Leong Hup very much remains a family business and details of the group's directors and key management may be found in Appendixes 2 and 3. The table below summarizes the members of the Lau family that sit on the Board of Directors as well as on the management team.

According to press statements, Leong Hup's Executive Chairman and co-founder, Dato' Lau Bong Wong, passed away on 23 Sep 2018, at the age of 75. Dato' Lau Bong Wong leaves behind his three other brothers who still hold positions in the group - Lau Chia Nguang (who succeeds him as Group Executive Chairman), Dato' Lau Eng Guang (Group Business Strategist) and Tan Sri Lau Tuang Nguang (who is also Leong Hup Group's CEO).

On the management team, there are six next generation cousins - Lau Joo Han is the son of the late Dato' Lau Bong Wong, while Lau Joo Hwa is Mr Lau Chia Nguang's son. Other cousins include Lau Joo Keat and three brothers - Lau Joo Hong, Lau Jui Peng and Lau Joo Heng.

Members of the Lau family on the Board of Directors and Management Team

Name	Age	Position held
Brothers		
Lau Chia Nguang	67	Executive Chairman/President Commissioner, Malindo Feedmill
Dato' Lau Eng Guang	65	Executive Director/Group Business Strategist
Tan Sri Lau Tuang Nguang	60	Executive Director, Group CEO/President Director of Malindo Feedmill
Next generation cousins		
Lau Joo Han (The late Dato' Lau Bong Wong's son)	44	Executive Director/CEO, Malaysia operations
Lau Joo Hwa (Lau Chia Nguang's son)	40	CEO, Singapore operations
Lau Joo Hong	48	Executive Director/CEO, Vietnam operations
Lau Jui Peng	47	Group Breeder CEO
Lau Joo Heng	44	CEO, Philippines operations
Lau Joo Keat	39	Executive Director/Country Head, Indonesia operations

Substantial shareholders - the Lau family

The table below shows the primary shareholders of Leong Hup. The two substantial shareholders of Leong Hup are Emerging Glory and Clarinden Investments with post-listing stakes of 52.8% and 9.0% respectively.

Emerging Glory is an investment holding company that is owned by the members of the Lau family. Clarinden Investments is principally a private equity investor, which acquired a 23% stake in Leong Hup on 9 Sep 2014. It is part of the Affinity EPS group, which is one of the largest private equity firms in Asia, with over USD15b in aggregate transaction value. It currently has two seats on Leong Hup's Board of Directors.

Substantial shareholders of Leong Hup post-listing

Emerging Glory	52.80%
Clarinden Investments	9.01%
Lau Joo Hong	0.68%
Lau Joo Han	1.89%
Lau Jui Peng	0.60%
Lau Joo Heng	0.60%
Lau Chia Nguang	1.45%
Dato' Lau Eng Guang	1.45%
Tan Sri Lau Tuang Nguang	1.57%
Lau Joo Keat	1.45%
	71.50%

Source: Company

Substantial shareholders of Emerging Glory

10	70/
CW Lau & Sons (CWL&S) 2	0%
HN Lau & Sons (HNL & S) 1	5%
Dato' Lau Eng Guang 1	5%
Tan Sri Lau Tuang Nguang 1	5%
Lau Chia Nguang 1	5%
Lau Joo Han 2	0%

Source: Company

Substantial shareholders of HN Lau & Sons			
Lau Hai Nguan	20%		
Lau Joo Keat	20%		
Lau Joo Hau	20%		
Lau Joo Ping	20%		
Lai Chong Koo	20%		
	100%		

Source: Company

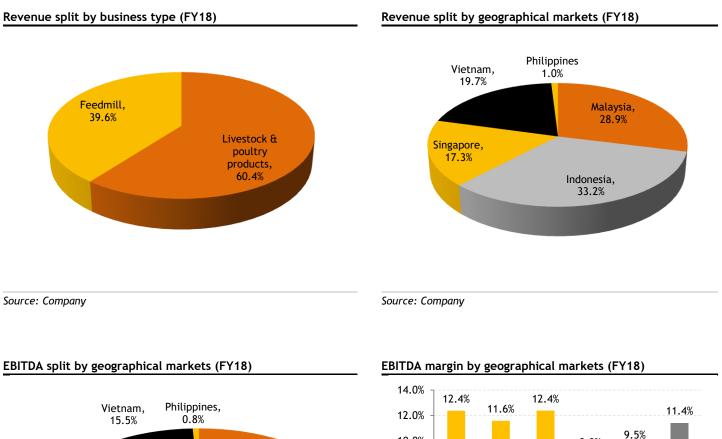
Substantial shareholders of CW Lau & Sons

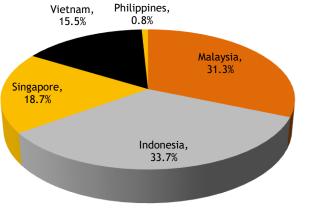
Lau Joo Hong	36%
Lau Jui Peng	32%
Lau Joo Heng	32%
	100%
Source: Company	

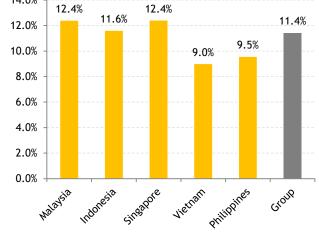
Current operations

One of the largest integrated producers in Southeast Asia

The principal activities of Leong Hup group today comprise two main businesses: feedmill and livestock. Not only are the operations vertically integrated, but geographical outreach over time has allowed the group to establish a foothold in the Singapore, Indonesia, Vietnam and Philippines markets as well. It is with this expansion that Leong Hup today is one of the largest fully integrated producers of poultry, eggs and livestock feeds in Southeast Asia.







Source: Company

Source: Company, Maybank KE

The feedmill business

Leong Hup's feedmill business involves the formulation, production and sale of feed for a variety of livestock. As at 31 Oct 2018, the group owned and operated 13 feedmills (5 in Malaysia, 5 in Indonesia and 3 in Vietnam) with a total production capacity of 2.6m MT of livestock feeds per annum. An additional feedmill line was added to its Westport feedmill in Nov 2018 while the fourth feedmill in Dong Nai, Vietnam, commenced operations in Jan 2019.



Source: Company

Provides for almost all of its internal needs

Leong Hup's feedmills produce almost all of the group's livestock feed requirements in Malaysia, Indonesia and Vietnam, and it purchases only a small quantity of such feeds from third parties. Of the total livestock feed produced, 43% was supplied internally within the group in 10M18, while 57% was sold to third parties.

Livestock feed is sold primarily under the "*Leong Hup*" brand name in Malaysia and Vietnam and "*Malindo*" in Indonesia. Other feeds brands include "*Gymtech*" and "*Emivest*" in Vietnam and "*A88*" in Indonesia.

Feedmill market share

Leong Hup estimates its 2017 market share of annual production of livestock feed to be 10.5% in Malaysia, 5.5% in Indonesia and 4.0% in Vietnam. In Indonesia, its feedmill business is held under 57.8%-owned (as at 31 Mar 2019) Malindo Feedmill, a company that has been listed on the Indonesia Stock Exchange since Feb 2006.

Capacity and utilization rates

The table below sets out the production capacity and our tabulated utilization rates, assuming 22 operational hours per day, an efficiency ratio of 80-90% and deductions for scheduled maintenance. Utilization rates are calculated as actual production divided by production capacity.

The production capacity for 10M18 below represents available capacity during the ten-month period. The decline in utilization rates in 10M18 for Malaysia and Vietnam was due to a substantial increase in production capacity.

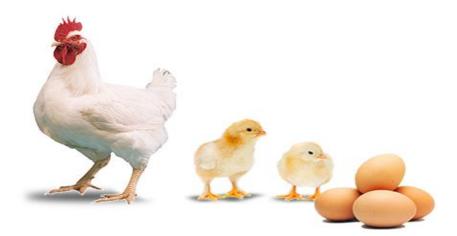
Feedmill pr	oduction capa	city vs actua 2017	l produ	ction & utilization rates (MT) 10M2018			
Malaysia	Pdtn	Actual	Util	Pdtn	Actual	Util	
	cap	pdtn	%	cap	pdtn	%	
	701,544	642,233	91.5	735,102	551,929	75.1	
Indonesia	1,172,160	712,194	60.8	976,800	641,157	65.6	
Vietnam	831,600	627,255	75.4	891,000	564,533	63.4	
	2,705,304	1,981,682	73.3	2,602,902	1 ,757,619	67.5	

Source: Company

The livestock business

Leong Hup's livestock business comprises:

- the rearing of Grandparent stock (GPS) Day Old Chicks (DOCs) in order to produce Parent stock (PS) DOCs and Broiler DOCs for internal use and external sale, and the rearing and sale of Broiler chicken;
- the rearing of PS Layer DOCs in order to produce Layer DOCs, and the rearing of Layer chickens in order to produce eggs;
- the rearing of PS Ducks in order to produce Broiler DODs, and the rearing and sale of Broiler ducks; and
- the distribution of fresh and processed downstream consumer food products.



DOCs, Broiler chickens and eggs sold in FY17 by region

	Msia	Indo	Viet	Spore	Phil	Total
No. of DOCs supplied (m)	175.2	240.9	36.3	30.7	4.9	488.0
No. of Broiler chickens (m)	56.9	16.3	20.8	11.6	1.4	107.0
Eggs sold (m)	1,287.8	53.4	384.9	-	-	1,726.1
No. of DOCs supplied	36%	49 %	7%	6%	1%	100%
No. of Broiler chickens	53%	15%	1 9 %	11%	1%	100%
Eggs sold	75%	3%	22%	0%	0%	100%

Source: Company

241 farms and hatcheries

Across the region (Malaysia, Indonesia, Vietnam and the Philippines) and as of 31 Oct 2018, Leong Hup operates a total of 241 farms and hatcheries, and engages 656 contract farms for its poultry business. It also operates six slaughtering plants across three countries - Malaysia, Indonesia and Singapore.

Distribution of farms owned and contracted as at 31 Oct 2018

	GPS	PS	Broiler	Layer	Layer	PS DOD	Hatcheries	Total	Contract	Total	Slaughter
	DOC	DOC	chicken	DOC	chicken	& Broiler duck		own farms	farms		Plants#
Malaysia	6	19	44	3	25*	11	8	116	19	135	1
Indonesia	4	24	29	2	1	1	18	79	326	405	1
Vietnam	0	4	0	1	3	0	1	9	303	312	0
Singapore^	0	4	26	0	0	0	2	32	1	33	4
Philippines	0	2	2	0	0	0	1	5	7	12	0
Total	10	53	101	6	29	12	30	241	656	897	6

Source: Company

* All of the Malaysia Livestock Business' Layer chicken farms are owned and operated by Teo Seng Group

^ All of the Singapore Livestock Business' farms and hatcheries are located in Malaysia. All of the Singapore Livestock Business' slaughtering plants are located in Singapore.

1 slaughter plant in Malaysia and 3 in Singapore are for Broiler chickens, while two (in Indonesia and Singapore respectively) are for Broiler ducks.

The contract farms

Leong Hup's contract farms accounted for 9% of revenue in FY17. In Malaysia, Broiler and Layer DOCs are sold to these farms and fully reared Broiler chickens and Layer chickens are repurchased at a pre-agreed price. In Indonesia, Vietnam and the Philippines, Leong Hup does not supply livestock but pays these contract farms a fee for rearing Broiler and Layer DOCs on its behalf.

Largest poultry producer in Malaysia

Leong Hup is the largest integrated poultry producer in Malaysia, with a domestic market share in 2017 of 27% by annual supply of DOCs. Of the Broiler chickens produced in Malaysia in 10M18, it slaughtered about 3% in its local slaughtering plant, transported 24% to Singapore for slaughtering and sold the remainder to wholesalers, wet market traders and third-party slaughtering plants.

Its egg production division is housed under 28.4%-owned Teo Seng Capital (TSC). TSC has 25 Layer chicken farms, all of which are in Johor. In 2017, Leong Hup had the second highest annual production of eggs in Malaysia, among the public listed integrated poultry companies domestically.

In Malaysia, there are 11 farms designated for its Duck Production operations, but this division contributed to less than 2% of the group's revenue from the Malaysian livestock business in 10M18.

Third largest poultry producer in Indonesia

With over 20 years of experience in poultry production, Leong Hup, through 57.8%-owned Malindo Feedmill, is the third largest integrated poultry producer in Indonesia, with a 7% market share in 2017 by annual supply of DOCs.

With no slaughter plants for Broiler chickens, all of its Broiler chickens are sold to external third parties. Meanwhile, the group has since ventured downstream through Malindo Food Delight, into the production of processed food products. These are marketed under brands such as "Sunny Gold", "Ciki Wiki" and "Sobat". Other activities in Indonesia include a) egg production and b) duck production.

Second largest poultry producer in Vietnam

Leong Hup has been operating in Vietnam for just over 11 years but it is today the second largest integrated poultry producer in Vietnam, with an estimated domestic market share of 13% by annual supply of DOCs in 2017.

The group does not have slaughtering or food processing operations in Vietnam and all Broiler chicken produced are sold to external third parties. Eggs are produced at its own layer farms and contract layer farms in the country and all eggs produced are sold in Vietnam.

The group also has a pharmaceutical plant in Vietnam which produces and supplies antibiotics, vitamins and disinfectants for livestock. With 148 products on the market, 49% of the medication is sold externally to third parties, while the balance is consumed internally.

Largest market share of slaughtered poultry in Singapore

Due to high land cost, farms owned by the group's Singapore livestock division are located in Malaysia. This division focuses on the slaughtering and distribution of Broiler chicken, with a domestic market share of 45.3% as at end-2017, based on the number of live chickens imported from Malaysia.

In 10M18, 60% of its Broiler chicken was sourced from the group's Malaysian livestock business while the balance was purchased from third parties. Slaughtered chicken accounted for about 33% of the FY17 revenue of its Singapore livestock business and about 57% of its Broiler chickens slaughtered in Singapore are halal. 12% of the Singapore livestock business' FY17 revenue was derived from the sale of Broiler DOCs and live Broiler chicken.

Another 25% of the Singapore livestock business' FY17 revenue was derived from its trading and storage operations, whereby through Leong Hup Distribution, the group sells and distributes frozen food products (chicken, beef, lamb and seafood) purchased from third parties in the US, Brazil, Argentina and Australia.

The sale of chilled swine contributed to 16% of the revenue of its Singapore livestock business in FY17. The swine business was fully divested as of 30 June 2018 and the group no longer sells any swine or swine-related products.

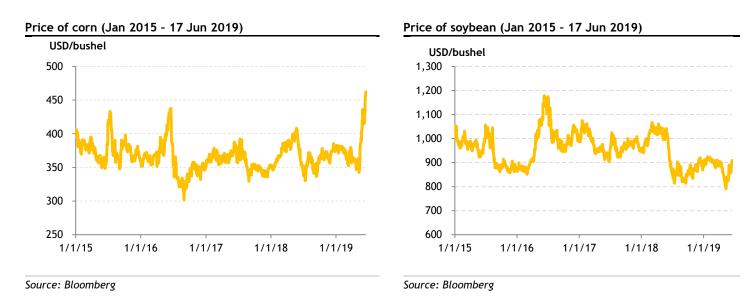
The business in the Philippines is in its infancy stage

Leong Hup's Philippines business commenced in 2015 and is in its infancy stage. All livestock feed requirements are purchased from third parties because the group does not have feedmills there, nor does it have slaughtering nor egg production facilities at present.

Raw materials

Feedmill business

The primary raw materials for Leong Hup's feedmill business are corn and soybean meal, which are imported from South America, except in Indonesia, where domestically produced corn is used.



Chicken production

The primary raw materials for the livestock division are GPS DOCs and PS DOCs. GPS DOCs are purchased from Europe - "Ross" from Aviagen and "Cobb" from Cobb. GPS DOCs are assessed if they are suitable for breeding, in which case they are classified as PS DOCs, otherwise they are deemed to be Broiler DOCs. Typically about 41-43% of DOCs are classified as PS DOCs.

GPS and PS DOCs grow for about 24 weeks and lay eggs for about 42 weeks, which take about 3 weeks to hatch. Broiler DOCs are hatched either from GPS or PS and they typically achieve maturity in 5 to 7 weeks, and then transported to wholesalers, wet markets or slaughtering plants. About 70% of Broiler DOCs is sold to third parties while 30% is retained.

Egg production

Leong Hup purchases 100% of its PS Layer DOCs of the Hisex breed from Institut de Selection Animale BV (Hendrix Genetics), a Netherlands-based company.

PS Layer DOCs grow over approximately 20 weeks to become PS Layers. PS Layers lay eggs for about 50 weeks and the eggs take 3 weeks to hatch. Approximately 85% of Layer DOCs is sold to third parties each month.

Of the Layer DOCs retained, they grow for 16 weeks to become layer chickens before they are transported to the layer chicken farms where they lay eggs for 68-73 weeks. Each layer chicken produces about six eggs per week.

Leong Hup's competitive edge

We believe that the following factors differentiate the Leong Hup group from its other domestic listed peers:

- a) A large consumer base, given the regional diversity of its operations, which allows it to capitalize on organic growth outside Malaysia, particularly in under-penetrated markets such as Vietnam and the Philippines.
- b) **Fully integrated operations** that serve to enhance operational efficiencies through economies of scale, product diversification and resilience through economic cycles.
- c) Stability and scalability through diversity. It is this diversity that also lends to earnings resilience, as earnings volatility in any one particular country as a result of vagaries in market conditions/government policies is offset by more stable contributions from other countries. It is also the scale of operations which provides the group with a leading edge in an industry with significant barriers to entry.
- d) An established track record from a long history in business and an unwavering focus on a single commodity.

Edge #1: A large consumer base

Leong Hup today, is a regional ASEAN consumer play, with operations in five out of the 10 ASEAN countries - Malaysia, Singapore, Indonesia, Vietnam and the Philippines. As highlighted by *Frost & Sullivan*, ASEAN has the third largest population globally after China and India and it is the seventh largest economy. The five countries that Leong Hup operates in, account for about 80% of the region's GDP and 78% of the population.

ASEAN's population statistics bode well for future consumption in that a) it is a relatively young population (median age 29.8 in 2018), b) it is expanding at a faster rate relative to other developed countries and c) the rate of urbanisation is on the rise, which bodes well for income and consumption patterns.

As far as the five countries in which Leong Hup operates are concerned, the cumulative population base of 505m people as at end-2018 is projected by the International Monetary Fund (as per *Frost & Sullivan's* industry report) to expand at a 3-year CAGR of 1.4%, to 525.9m in 2021.

Population growth and average age (2018E)

	Population (m)	CAGR (2018E-2021F)
Malaysia	32.4	1.3%
Indonesia	265.3	1.3%
Singapore	5.7	0.9%
Vietnam	94.6	1.0%
Philippines	107.0	2.0%

Source: Frost & Sullivan

Meanwhile, disposable income in these countries is also on the rise. Based on *Frost & Sullivan's* industry report, ASEAN's disposable income per capita is projected to expand at a 2-year CAGR (2018E-2020F) of 3.7% and this compares against rates of just about 1.4% for the US, 1.4% for the EU and 0.3% for Japan.

Growth in disposable income per capita

	CAGR (2012-18E)	CAGR (2018E-21F)
Malaysia	5.0%	5.3%
Indonesia	2.9%	3.5%
Singapore	2.3%	2.1%
Vietnam	5.2%	4.8%
Philippines	3.9%	3.5%

Source: Frost & Sullivan

It is the growth in disposable income per capita which is expected to propel poultry meat consumption, especially as awareness of the importance of daily protein intake rises with increasing affluence.

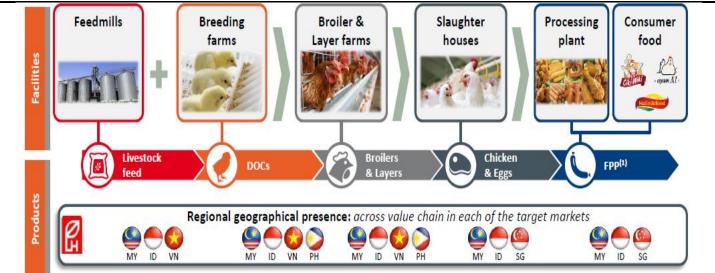
According to *Frost & Sullivan*, poultry is the preferred source of protein in ASEAN because of:

- Affordability. It is 2-3x more affordable than pork in Vietnam and Singapore in 2017 and 3-4x more affordable than beef in Indonesia, Malaysia, Singapore and Vietnam.
- Efficiency. The feed conversion ratio (FCR) for chicken is just 1.83x versus 2.75x for swine and 4.50-7.50x for beef cattle.
- Shorter farming periods. These range from just 5-7 weeks for chicken to 5-6 months for swine and 18 months for beef cattle.
- **Religious neutrality.** In Muslim countries such as Malaysia and Indonesia, consumption of pork is prohibited, making poultry the most preferred meat source.

Edge #2: Fully integrated operations

Leong Hup is one of the largest, fully integrated poultry players in Southeast Asia and it is this "Farm-to-Plate" business model that bestows various innate benefits to the group. We believe these include:

- **Consistency of supply.** Wastage is minimized especially since the group receives real-time feedback from its downstream businesses on the quality and performance of its livestock feeds. For instance, when there was a shortage of corn in Indonesia, Leong Hup was able to adjust its feeds production using other raw materials of similar nutritional value.
- Quality assurance. Management sources its genetics directly from leading providers and is able to formulate and produce its own livestock feeds to suit the age and type of its poultry.
- **Bundling opportunities.** Vertical integration allows the group to bundle various products and services, e.g. selling livestock feeds or vitamins and other services, along with its DOCs, which enables more revenue generating opportunities.
- Increased efficiency. The increasing use of the group's own Broiler farms instead of contract farms contributes to increased farm efficiency, for such farms can be better run. Moreover, own farms help to mitigate price volatility, as the group is able to guarantee the delivery of large volumes of poultry at fixed prices to large customers.
- **Cost and price stability.** In times of market price volatility, the group has the option to sell DOCs at any stage in the production process, or to further process these at the Broiler stage, if DOC prices are weak. This flexibility allows the group to counter volatility in product and raw material prices.



A fully-integrated "Farm-to-Plate" business model

Source: Maybank KE

Edge #3: Stability and scalability through diversity

Unlike most other domestic listed poultry players that are single-country focused, we believe that Leong Hup's size and regional diversity serves it well. It is the only poultry producer to be concurrently present in Malaysia, Singapore, Indonesia, Vietnam and the Philippines.

It is this geographical spread that lends to greater resilience against country specific risks such as domestic competition, regulatory risk, price volatility or under-performance in any particular market. This spread also helps to somewhat shield the group against location specific risks such as pandemics, livestock diseases and fire hazards.

It is this vast operational knowledge and best practices from existing operations that the group employs to achieve scalability in new markets. For instance, in Vietnam, where it commenced its breeder farm operations and Broiler DOC production in 2007, revenue growth has been exponential and annual revenues have since crossed the MYR1b mark in less than 10 years.

These practices are being replicated in the Philippines market which is still in its infancy stage and nascent poultry markets that could be considered in the future include Cambodia.

Edge #4: An established track record

Leong Hup's history dates back to 1978 and that the Lau family is very much entrenched in the operations of the group ensures that the knowledge and experience garnered over the years is retained. Moreover, each of the overseas operations is currently managed by a nephew/son of the founders, thus ensuring that the best practices in Malaysia are duplicated within the region.

It is with its experience and established track record that the group has:

- Access to quality genetics through its strong relationships with high-quality genetics companies such as Cobb and Aviagen.
- Gained vast knowledge of the compliance requirements of each jurisdiction's food and agriculture authorities. These include requirements pertaining to a) the import of raw materials, b) state influence on pricing and supply of DOCs, c) certification requirements for farms and slaughterhouses and other licensing requirements.
- Complied with strict quality and compliance standards in the countries where it operates. Its facilities are certified according to international standards such as ISO FSMS, HACCP and Food Safety Partners. Where required, in countries such as Malaysia and Indonesia, Leong Hup has obtained Halal certification.
- Built-up long-established relationships with customers that value its consistency in supply and quality.

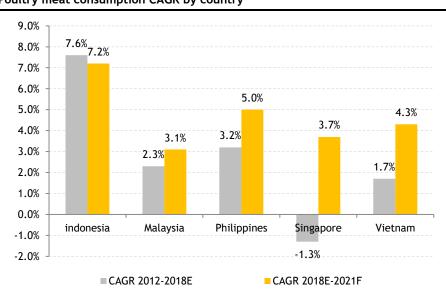
The growth engines

Looking forward, we expect Leong Hup's earnings growth over the next few years to be propelled primarily by factors such as:

- e) Organic growth in demand for chicken and eggs in the five ASEAN countries that Leong Hup operates in, which in turn, will be driven by population growth and income expansion.
- f) **Capacity expansion and increased investments** into under-penetrated markets such as Vietnam and the Philippines as well as ongoing investments in the more mature markets such as Malaysia and Indonesia.
- g) The push up the value chain through greater integration of downstream and upstream activities as more feedmills are built, as well as the shift in production towards owned rather than contract farms. More closed houses are also expected to be built to ensure better control over the quality of the chickens produced. These moves should serve to further enhance cost efficiencies and margins for the group.

Organic demand growth

Organic growth in demand for chicken and eggs in the five ASEAN countries that Leong Hup operates in will be driven by population growth and income expansion. According to *Frost & Sullivan*, poultry meat consumption in the five ASEAN countries has expanded at a 6-year (2012-2018E) CAGR ranging from -1.3% for Singapore to 7.6% for Indonesia. It projects a 3-year (2018E-2021F) consumption CAGR of 3.7% for Singapore, 3.1% for Malaysia, 5.0% for the Philippines, 4.3% for Vietnam, and 7.2% for Indonesia.



Poultry meat consumption CAGR by country

Source: Frost & Sullivan

Capacity expansion plans

75.5% of the IPO proceeds i.e. MYR207.7m, has been earmarked for capex in Malaysia (MYR40.7m), Vietnam (MYR47m) and the Philippines (MYR120m).

In Malaysia, the proceeds will be allocated to the expansion of its closed-house Broiler farms. In Vietnam, the proceeds will go towards the expansion of its Dong Nai feedmill plant. It will also go towards new equipment and machineries across its three feedmill plants and the expansion of its livestock farms. In the Philippines, the first feedmill plant (240,000 MT per annum) is expected to commence construction in 3Q19 and is scheduled to complete in 4Q20.

The push up the value chain

The push up the value chain serves to improve overall margins and profitability and this can be achieved through the following strategies:

- Integrating downstream and upstream operations. In Malaysia and Indonesia, the feedmills can cater fully to internal requirements, providing better feed quality control and quicker response to raw material price changes by adjusting the feed mix. The construction of Vietnam's fourth feedmill plant is almost completed and plans are afoot to expand the capacity of the existing plants. The first feedmill plant in the Philippines is to be constructed by 2020.
- The replacement of contract farms with owned farms. Leong Hup does rely quite a bit on contract farms for its livestock, particularly in countries such as Indonesia, Vietnam and the Philippines. The table below sets out the percentage of owned-to-contract farms within the group. With the gradual shift towards owned farms, Leong Hup will be able to better control the quality of production while cutting back on middlemen costs.

	Owned farms	Contract farms	Total	% owned
Malaysia	116	19	135	86%
Indonesia	79	326	405	20%
Vietnam	9	303	312	3%
Singapore	32	1	33	97%
Philippines	5	7	12	42%
Total	241	656	897	27%

Owned farms versus contract farms

- The replacement of open farms with closed farms. Closed farms essentially allow for better control over the quality of chicken and minimise the risk of infection from external sources.
- Investments in automation processes for better efficiencies and margins. Leong Hup's feedmills in Malaysia are fully automated while for its livestock business, most of its farms employ close-house systems which are environmentally controlled to optimize growth rates, health and mortality rates. Moves are afoot to automate the feedmills in Indonesia and Vietnam as well.

The competitive landscape in Malaysia

The following is a cursory examination of some of Leong Hup's domestically listed peers. Competitors include CAB Cakaran, CCK Consolidated, DBE Gurney Resources, Lay Hong, LTKM, PWF Consolidated, QL Resources, Sinmah Capital and TPC Plus, all of which are **NOT RATED** except QL Resources (QLG MK, SELL, TP: 6.00). The information below is derived from publicly available sources such as financial statements, annual reports and/or the respective companies' websites.

CAB Cakaran (CABC MK, Not Rated)

CAB is one of the largest integrated poultry producers in Malaysia, and its farms are primarily located in Penang, Kedah, Negeri Sembilan and Melaka. It operates medium-sized supermarkets under Pasaraya Jaya Gading Sdn Bhd and Home Mart Fresh & Frozen Sdn Bhd. It also owns and operates the Kyros Kebab fast food franchise chain. CAB completed the acquisition of the breeder and broiler farms from Sinmah Group in 2018. In Nov 2017, CAB signed a joint venture agreement with the Salim Group to set up an integrated poultry business in Indonesia, which is expected to commence in 2Q19.

CAB Cakaran's	segmental	earnings in	FYE9/18	(MYR'm)
erte cultural all s	Jeginentea.	earnings in		(*** · · · · · · · · · · · · · · · · · ·

CAD Cardian's segmental earnings in FTE7/To (MTR III)							
FYE: Sep 2018	Poultry	Marine pdts	Fast food	Super- market	Other	Total	
Revenue	1,616.0	0.1	2.9	131.5	-	1,750.4	
Op profit	72.0	(0.1)	0.1	(0.8)	(11.1)	60.0	
Others						(19.4)	
Pretax profit						40.7	
Source: CAB Cakaran							

- - -

CCK Consolidated (CCK MK, Not Rated)

CCK is involved in integrated poultry farming and retailing, with operations primarily in Sarawak, Sabah and Indonesia. Its network of more than 50 retail stores in Sarawak and Sabah carries mainly fresh dressed chicken and chicken parts (60% of the stores' products). The remaining 40% comprises frozen products, table eggs and fresh fruits and vegetables.

CCK Consolidated's segmental earnings in FY18 (MYR'm)

FYE: Dec 2018	Poultry	Prawn	Food	Retail	Corporate	Group
Revenue	119.4	23.0	14.4	482.7	-	639.5
Op profit	8.8	4.5	1.2	22.6	17.8	54.9
Others						(20.5)
Pretax profit						34.4

Source: CCK Consolidated

DBE Gurney Resources (DBE MK, Not Rated)

Based in Perak, DBE is an integrated poultry farmer cum food processor with activities ranging from animal feed production to the harvesting of table eggs/broilers, to the final distribution of all its branded products to the retail market. Via a joint development agreement with Misi Jutari Sdn Bhd, it has also ventured into property development with a mixed development project at Bota Kanan, Seri Iskandar Perak.

DBE Gurney's segmental earnings in FY18 (MYR'm)

FYE: Dec 2018	Inv't hlg	Poultry	Prop dev't	Others	Group
Revenue	-	95.5	12.7	-	108.2
Pretax profit	(68.7)	(42.6)	4.5	79.8	(26.9)
Source: DBE Gurpe	n /				

Source: DBE Gurney

Lay Hong (LAY MK, Not Rated)

Lay Hong's two principal core businesses are Integrated Livestock Farming and Processing (ILFP) and retail operations. The ILFP business accounted for over 80% of the Group's revenue in FY19. The businesses are carried out primarily in Peninsular Malaysia state of Selangor, Perak, Melaka and Sabah. The group currently operates 17 retail outlets in Sabah.

Lay Hong's segmental earnings in FYE3/19 (MYR'm)

FYE: Mar 2019	ILFP	Retail	Adjustments	Total
Revenue	682.1	137.2	(22.5)	796.8
Pretax profit	5.4	(1.8)	-	3.6

Source: Lay Hong

LTKM (LTKM MK, Not Rated)

LTKM is one of the leading chicken egg producers in Malaysia and a pioneer in producing Omega-3 enriched eggs, with an in-house feedmill plant. The company also has residential property projects in the town of Jenjarom, Kuala Langat.

FYE: Mar 2019	Poultry	Sale of sand	Invt hldg	Prop devmt	Group
Revenue	193.7	2.3	0.4	-	196.3
Pretax profit	34.0	0.0	(2.1)	(0.9)	31.0
C					

Source: LTKM

PWF Consolidated (PW MK, Not Rated)

PWF's core business is integrated poultry farming, and its customer base is located mainly in northern and central Peninsular Malaysia. The main products of the group are broiler, table eggs and processed chicken, and its Broiler farms are located in the states of Kedah, Perak and Penang.

QL Resources (QLG MK, SELL, TP: MYR6.00)

There are three main pillars to QL's business, with marine products manufacturing (MPM) being the largest contributor in FY3/19. QL is the largest surimi producer in Southeast Asia.

Its livestock division has four sub-pillars: animal feed and raw material trade, commercial feed milling, layer farming and Broiler integration activities. QL is the leading egg producer in Malaysia, producing 5.5m eggs/day in FY18 as compared to 3.7m eggs/day for Teo Seng Capital. QL has regional layer farms in Indonesia and Vietnam that cumulatively lay close to 1.5m eggs/day.

QL's third pillar is its palm oil business, whereby the group owns more than 16,000 ha of land in East Malaysia and North Kalimantan, Indonesia. QL is also the master franchisee of the Family Mart convenience store chain in Malaysia.

QL Resources' segmental earnings in FY3/19 (MYR'm)

FYE: Mar 2019	МРМ	Palm oil	Livestock	Total
Revenue	1,007.9	303.1	2,302.3	3,613.3
Pretax profit	153.3	20.4	98.6	272.3
Source OL Resources				

Source: QL Resources

Sinmah Capital (SINM MK, Not Rated)

Sinmah is involved in the manufacture and sale of animal feeds, Broiler contract farming, trading of Broilers and DOCs and poultry biologicals. The other principal activity of the group is housing development in Melaka.

Sinmah Capital's segmental earnings in FY18 (MYR'm)

FYE: Dec 2018	Poultry	Property	Others	Group
Revenue	347	26	(192)	180.9
Pretax profit/(loss)	(83)	1	47	(35.1)
Course Cinnersh Courses				

Source: Sinmah Capital

TPC Plus (TPC MK, Not Rated)

Principally engaged in the production and sale of table eggs and feeds, mainly in the southern region of Peninsular Malaysia.

TPC Plus' segmental earnings in FY18 (MYR'm)

FYE: Dec 2018	Livestock	Feed	Others	Group
Revenue	134.9	77.8	0.3	213.1
Segment results	(0.2)	7.5	1.1	8.4
Others				(4.0)
Pretax profit				4.5
Source: TPC Plus				

A comparison of peer financials

Company	FY	Reve	Revenue (MYR'm) Net profit (MYR'm)		Net gearing (x)	ROAE (%)	
	end	2018	2017	2018	2017	2018	2018
Leong Hup	Dec	5,747	5,501	186	193	1.1	15.0%
CAB Cakaran	Sep	1,750	1,492	30	58	0.6	7.3%
CCK Consolidated	Dec	639	616	26	29	0.1	10.6%
DBE Gurney Resources	Dec	108	112	(28)	(20)	0.0	(39.1%)
Lay Hong *	Mar	797	848	7	27	0.7	2.1%
LTKM *	Mar	196	175	21	2	0.2	8.8%
PWF Consolidated	Dec	352	347	15	20	0.4	5.0%
QL Resources *	Mar	3,613	3,263	225	203	0.5	12.1%
Sinmah Capital	Dec	181	300	(39)	15	0.2	(38.0%)
Teo Seng Capital	Dec	490	424	30	3	0.5	11.5%
TPC Plus	Dec	213	114	3	(0)	0.5	3.9%

Source: Respective companies' financial statements, Maybank KE

* Data is for FYE3/18 and FYE3/19

A comparison of listed regional peers

As per Frost & Sullivan's industry report, of the public-listed poultry companies in Leong Hup's countries of operation as at end-Dec 2017, only Charoen Pokhpand Foods PCL (CP Foods; CPF TB, BUY, TP: THB31.50), Japfa Ltd (Japfa; JAP SP, BUY, TP: SGD0.93) and QL Resources operate in at least two of the countries of focus for Leong Hup.

Apart from Frost & Sullivan, the information pertaining to Leong Hup's regional peers is derived from publicly available sources such as financial statements, annual reports and/or the respective companies' corporate websites.

Focusing on CP Group and Japfa, some of the comparatives as at end-2017, as provided by Frost & Sullivan are as follows:

Market share comparison between	Leong Hup (LH), CP Group and Japfa, 2017

	LH	СР	Japfa
Malaysia			
Feedmill	10.5%	5.2%	NP
DOCs supplied	27.1%	7.7%	NP
Indonesia			
Feedmill	5.5%	30.9%	20.6%
DOCs supplied	7.0%	37.2%	20.5%
Vietnam			
Feedmill	4.0%	17.1%	4.4%
DOCs supplied	12.7%	31.0%	9.8%
Source: Frost & Sullivan	NP = not present		

Revenue	contribution	by	country,	2017

	100.0%	100.0%	100.0%
Others	0.5%	26.3%	16.3%
China	-	25.7%	-
Vietnam	19.2%	12.5%	9.5%
Singapore	19.8%	-	-
Malaysia	28.8%	-	-
Indonesia	31.7%	35.5%	74.2%
	LH	СР	Japfa
			-

Source: Frost & Sullivan

Charoen Pokhpand Foods PCL (CPF TB, BUY, TP: THB31.50)

Listed on the Thailand Stock Exchange, CP Foods is a food giant in the region, with integrated agro-industrial and food businesses not just in Thailand, but globally as well, encompassing swine, Broiler, layer, duck, shrimp and fish. Its businesses span 16 countries from Thailand to Russia to the UK and the US. In ASEAN, the group has livestock businesses in Thailand, Malaysia, Cambodia, Vietnam, Laos and the Philippines. In 2017, the group derived 30% of its sales from domestic sales in Thailand, 6% from Thai exports and 64% from its international operations. CP Foods also holds a 34% stake in CP All (CPALL TB, BUY, TP: THB86.00), which is the 7-Eleven franchisee in Thailand.

CP Foods' segmental revenue in FY18 (MYR'm)

Total revenue	29,084	28,181	11,403	68,668
Others	4,454	8,524	4,571	17,550
Vietnam	3,502	6,568	292	10,361
China	14,844	2,469	804	18,116
Thailand	6,284	10,620	5,736	22,640
FYE: Dec 2018	Feed	Farm	Food	Total

Source: CP Foods, Maybank KE Exchange rate used: 1MYR:THB7.89

Japfa Ltd (JAP SP, BUY, TP: SGD0.93)

Headquartered in Singapore and listed on the Singapore Stock Exchange, Japfa specializes in producing dairy, protein staples (poultry, beef, swine & aquaculture) and packaged food. Its upstream activity comprises animal feed production, and the breeding of dairy cattle, poultry, beef cattle, swine and aquaculture.

Its midstream activities include milking, poultry farming, beef feedlots, swine fattening and aquaculture commercial farming. Downstream activities comprise branded dairy products and branded consumer food.

The group's operations span across Indonesia, Vietnam, Myanmar, India and China. Its poultry feed and poultry breeding operations are located in all these countries except for China, where the focus is on cattle feed, breeding and milking operations.

Japfa Ltd's segmental earnings in FY18 (MYR'm)

FYE: Dec 2018	Animal protein Indonesia	Animal protein Others	Dairy	Consumer food	Others	Group
Revenue	10,052	2,496	1,708	871	66	15,193
Pretax profit	906	120	183	(83)	(78)	1,047
Source: lanfa l td	Maubank KE	Exchan	ao rato u	od. 1115D.MV	DA 30	

Source: Japfa Ltd, Maybank KE Exchange rate used: 1USD:MYR4.30

Other listed regional peers (list is not comprehensive) include:

- PT Charoen Pokhpand Indonesia Tbk,
- Japfa Ltd's 52.4%-owned PT Japfa Comfeed Indonesia,
- PT Sierad Produce,
- Lee Feed Mill PLC, and
- GFPT Ltd

PT Charoen Pokhpand Indonesia Tbk (CPIN IJ, Not Rated)

A 55.5% subsidiary of PT Charoen Pokhpand Indonesia Group, CPIN has three core businesses - feed manufacturing, poultry farming and the production of processed food products. CPIN is said to be the largest DOC producer in Indonesia.

CPIN's segmental revenue in FY18 (MYR'm)

FYE: Dec 2018	Feed	DOC	Broilers	Processed	Others	Total
				foods		
Revenue	8,279	5,067	1,999	1,392	585	17,324
Source: CPIN, Mayba	nk KE	Exchange rate used: MYR1: IDR3,115				

PT Japfa Comfeed Indonesia (JPFA IJ, Not Rated)

Listed on the Indonesia Stock Exchange and a 52.4%-owned subsidiary of Japfa Ltd, PT Japfa is involved in integrated poultry farming, integrated beef fattening and aquaculture, but the poultry business is by far the largest contributor at 87% of FY18 revenue (cattle 4%, aquaculture 6%). PT Japfa ranks as the 2nd largest poultry feed and DOC producer in Indonesia after CPIN.

PT Japfa Comfeed's segmental earnings in FY18 (MYR'm)

FYE: Dec 2018	Animal	DOCs	Commercial	Aqua	Cattle	Trading	Others	Total
	feeds		farm					
Revenue	3,886	1,032	4,380	806	529	287	-	10,920
Op results	641	430	320	3	(11)	53	21	1,457
Others								(465)
Pretax profit								992
Source: DT Janfa Con	afood Mauba	mk KE	Evebando ra	to used. MVE	1. 1002 115			

Source: PT Japfa Comfeed, Maybank KE

Exchange rate used: MYR1: IDR3,115

PT Sierad Produce Tbk (SIPD IJ, Not Rated)

Sierad Produce is one of the largest integrated poultry companies in Indonesia, with operations ranging from feed mill to processed foods.

FYE: Dec 2018	Feed	DOC	Dressed	Partnership	Others	Total
			chicken			
Revenue	506	138	129	105	124	1,002
Pretax loss	12	25	(2)	13	(7)	41
Others						(30)
Pretax profit						11

Source: Sierad Produce, Maybank KE Exchange rate used: MYR1: IDR3,115

Lee Feed Mill PLC (Lee TB, Not Rated)

Lee Feed Mill's principal activities are 1) manufacturing animal feed, 2) crop drying, 3) experimental farming, and 4) crop farming. The company produces feed for swine, chickens, ducks, cattle, fish and shrimp.

GFPT Public Company Ltd (GFPT TB, Not Rated)

GFPT was founded in 1981 and is an integrated poultry producer. 98.1%-owned Krungthai Food produces animal and aquatic feed. The group is also engaged in the production and distribution of processed foods such as sausages, meat balls and chicken rolls under its own "GF Foods" brand, while 49%-owned GFPT Nichirei (Thailand) is engaged in chicken evisceration, processing and distribution.

GFPT segmental breakdown (FY18) (MYR'm)

FYE: Dec 2018	Evisceration	Broiler	Feedmill	Parent	Chicks	Processed	GP	Total
	chicken	farm		chicken	dist'n	food	chickens	
Revenue	956.1	617.2	396.5	16.2	13.3	89.8	20.3	2,109.3
Op profit	6.4	35.3	91.4	27.5	(3.8)	(0.5)	9.5	165.8
Associates								9.0
Finance cost								(10.0)
Pretax profit								164.8
Source: GFPT, Maybank K	E E	xchange ra	te used: 1MYI	R:THB7.89				

A comparison of regional peer financials

Company	FY	Revenue (MYR'm)		Net pro	fit (MYR'm)	Net gearing (x)	ROAE (%)
	end	2018	2017	2018	2017	2018	2018
Leong Hup	Dec	5,747	5,501	186	193	1.1	15.0%
CP Foods	Dec	68,668	63,545	1,968	1,933	1.2	9.3%
CP Indonesia	Dec	17,324	15,850	1,461	802	0.1	26.0%
Japfa	Dec	15,193	13,717	432	6	0.9	13.6%
Japfa Comfeed	Dec	10,920	9,504	696	300	0.6	24.5%
Sierad Produce	Dec	1,002	787	8	(114)	0.9	3.2%
Lee Feed Mill	Dec	374	421	10	24	Net cash	3.2%
GFPT	Dec	2,109	2,145	132	211	0.2	8.5%

Source: Respective companies' financial statements, Maybank KE

Exchange rates used: 1USD: MYR4.30, 1MYR: THB7.89, MYR1: IDR3,115

A review of 1Q19 results

Year end: Dec (MYR'm)	1Q19	1Q18	% YoY
Revenue	1,506.4	1,346.4	12%
Other income	6.2	9.3	(33%)
Operating expenses	(1,311.9)	(1,204.8)	9 %
EBITDA	200.6	150.9	33%
Dep'n & amortization	(52.9)	(49.0)	8%
EBIT	147.7	101.8	45%
Finance costs	(32.9)	(24.5)	34%
Share of associate profits	0.0	0.1	(63%)
Pretax profit	114.9	77.4	48%
Tax	(24.6)	(16.4)	50%
MI	(29.7)	(8.3)	256%
Net profit	60.6	52.7	15%
EBITDA margin	13.3%	11.2%	
EBIT margin	9.8%	7.6%	
Pretax profit margin	7.6%	5.8%	
Net profit margin	4.0%	3.9%	
Tax rate	21.4%	21.2%	
Courses Comments			

Source: Company

Revenue breakdown	-		
FY Dec (MYR m)	1Q19	1Q18	% YoY
Livestock & poultry products	859.7	837.2	3%
Feedmill	643.6	506.7	27%
Others	3.1	2.5	23%
Total revenue	1,506.4	1,346.4	12%
Malaysia	442.2	394.3	12%
Singapore	193.3	271.3	(29%)
Vietnam	293.2	249.4	18%
Indonesia	563.4	420.5	34%
Philippines	14.1	10.9	30%
Total revenue	1,506.4	1,346.4	12%
Source: Company			

EBITDA breakdown FY Dec (MYR m) 1Q19 1Q18 % YoY Livestock & poultry products 118.9 94.5 26% Feedmill 85.2 62.5 36% Others (3.5) (6.1) (43%) Total EBITDA 200.6 150.9 33% EBITDA margin Livestock & poultry products 13.8% 11.3% Feedmill 13.2% 12.3% Total 13.3% 11.2%

1Q19 revenue expanded 12% YoY, led primarily by feedmill revenue growth of 27% YoY, while livestock revenue rose at a steady pace of 3% YoY.

On a geographical basis, there was strong double-digit revenue growth across the various countries, ranging from 12% YoY in Malaysia to 18% YoY in Vietnam, 34% YoY in Indonesia and 30% YoY in the Philippines.

Feedmill revenue growth was led by higher sales volume and average selling prices of feed in Indonesia and Vietnam, as well as capacity addition, as Leong Hup's Dong Nai feedmill plant in Vietnam commenced operations in Jan 2019. Livestock revenue growth was aided by higher sales volume and egg prices in Malaysia, as well as higher Broiler DOC selling prices in Indonesia.

An exception was Singapore, which saw revenue drop 29% YoY. This was due to the loss of revenue from Jordon International Food Processing, a subsidiary that was disposed off on 30 Jun 2018.

EBITDA jumped 33% YoY, as revenue growth contributed to the expansion in EBITDA margin from 11.2% in 1Q18 to 13.3% in 1Q19. Livestock EBITDA margin expanded to 13.8% in 1Q19 from 11.3% in 1Q18, while feedmill EBITDA margin improved to 13.2% from 12.3% in 1Q18.

While pretax profit expanded 48% YoY in 1Q19, net profit grew at a slower pace of 15% YoY due mainly to higher minority interest deductions for PT Malindo and Teo Seng Capital. Leong Hup's 1Q19 net profit of MYR61m accounts for 23% of our FY19 forecast of MYR260m (our main assumptions are outlined overleaf).

Looking forward

Profit & loss summary

						3-yr (FY18-21E)
YE: Dec (MYR'm)	2017	2018	2019E	2020E	2021E	CAGR
Revenue	5,501	5,747	6,137	6,600	7,094	7%
COGS	(4,589)	(4,741)	(5,024)	(5,410)	(5,814)	7%
Gross profit	913	1,006	1,113	1,191	1,280	8%
Operating expenses	(359)	(382)	(375)	(398)	(423)	3%
Other operating income	30	31	39	51	62	26%
EBITDA	583	655	778	844	919	12%
Dep'n & amortization	(199)	(197)	(216)	(235)	(251)	8%
EBIT	384	457	562	609	668	13%
Net interest expense	(92)	(109)	(117)	(127)	(135)	7%
Associates & JV	0	1	1	1	1	6%
Pretax profit	292	349	446	483	534	15%
Tax	(45)	(102)	(100)	(109)	(120)	6%
Minority interest	(55)	(61)	(85)	(81)	(83)	11%
Net profit	193	186	260	294	331	21%
Core net profit	193	225	260	294	331	14%
Growth rates						
Revenue	5%	4%	7%	8%	7%	
EBITDA	-10%	12%	19 %	8%	9 %	
EBIT	-15%	19 %	23%	8%	10%	
Pretax profit	-16%	19 %	28%	8%	10%	
Net profit	6%	-3%	40%	13%	13%	
Core net profit	6%	17%	16%	13%	13%	
Margins						
EBITDA	10.6%	11.4%	12.7%	12.8%	13.0%	
EBIT	7.0%	8.0%	9.2%	9.2%	9.4%	
Pretax profit	5.3%	6.1%	7.3%	7.3%	7.5%	
Net profit	3.5%	3.2%	4.2%	4.4%	4.7%	
Core net profit	3.5%	3.9%	4.2%	4.4%	4.7%	
Tax rate	15.3%	29.2%	22.5%	22.5%	22.5%	

Source: Company data, Maybank KE

3-year total revenue CAGR of 7%

Our forecasts are for a 3-year (FY18-FY21E) revenue CAGR of 7%, blending a 3-year feedmill revenue CAGR of 13% with moderate livestock revenue CAGR of 3%.

Revenue breakdown						
						3-yr (FY18-
YE: Dec (MYR'm)	2017	2018	2019E	2020E	2021E	21E)
Feedmill	2,138	2,262	2,495	2,857	3,247	13%
Livestock & other poultry	3,350	3,471	3,627	3,728	3,830	3%
Revenue from sale of goods	5,487	5,732	6,122	6,585	7,078	7%
Other revenue	14	14	15	16	16	5%
Total revenue	5,501	5,747	6,137	6,600	7,094	7%
Growth rates						
Feedmill	10.0%	5.8%	10.3%	14.5%	13.7%	
Livestock & other poultry	1.5%	3.6%	4.5%	2.8%	2.7%	
Revenue from sale of goods	4.7%	4.5%	6.8%	7.6%	7.5%	

Source: Company data, Maybank KE

3-year feedmill revenue CAGR of 13%

Upstream capacity expansion is a continuous development as Leong Hup strives for greater economies of scale, particularly in the newer markets of Vietnam and the Philippines. Feedmill capacity expansion plans in the near term include:

- The expansion of its Dong Nai feedmill in Vietnam, which is aimed at increasing the group's annual production capacity in Vietnam from 1,069,200 MT per annum in 2018 to 1,496,880 MT per annum in 2020.
- Construction of an aquaculture feedmill plant in Vietnam (targeted to commence production in 1Q21), with an annual production capacity of 77,760 MT.
- Construction of the group's very first feedmill in the Philippines. This plant is expected to have an initial annual production capacity of 144,000 MT, with the potential for upgrade to 240,000 MT per annum.

The table below sets out our average utilization rate assumptions for the various countries, taking into account initially low utilization rates for new capacity that comes on stream.

reedinin capacity c		E 3			
YE: Dec (MYR'm)	2017	10M18	2019E	2020E	2021E
Malaysia	92 %	75%	75%	77%	79 %
Indonesia	61%	66%	70%	75%	80%
Vietnam	75%	63%	56%	60%	66%
Philippines	na	na	na	15%	20%
Total	73%	68%	66%	68%	73%

Feedmill capacity utilization rates

Source: Company data, Maybank KE

In Indonesia, with expectations of the IDR strengthening against the MYR in FY19 coupled with higher capacity utilization rates, we expect Indonesia's feedmill revenue to expand by 14% in FY19. Vietnam, meanwhile, is expected to benefit from capacity expansion in FY19 and thus we expect its feedmill revenue to expand by 11% YoY while we forecast maiden revenue from the Philippines in FY20 from its newly installed feedmill capacity.

3-year livestock revenue CAGR of 3%

Poultry livestock consumption, in our opinion, is driven by consumer demand, which to a large extent, is dependent on GDP growth. Maybank KE's Economics Team forecasts the economic growth rates below for the respective countries that Leong Hup is represented in and the general expectation is for relatively stable economic growth across the five countries, though a more acute slowdown is expected of Singapore, which is more susceptible to global economic volatility.

GDP growth estimates

	2016	2017	2018	2019E	2020E
Malaysia	4.2%	5.9 %	4.7%	4.7%	4.7%
Singapore	2.8%	3.9%	3.2%	1.6%	2.1%
Indonesia	5.0%	5.1%	5.2%	5.1%	5.3%
Vietnam	6.2%	6.8%	7.1%	6.8%	6.5%
Philippines	6.9%	6.7%	6.2%	6.0%	6.5%

Source: Bloomberg, Maybank KE

As a commodity, however, poultry sales volume is also impacted by uncontrollable issues such as the demand/supply of other competing livestock, disease outbreaks, etc, which lead to much fluctuation in selling prices and sales.

In Malaysia, Broiler DOC and chicken prices were relatively stable in 2018, down a marginal 5% YoY during the year, based on publicly available data. Egg prices, however, spiked in 2H18 due largely to the incidence of chicken deaths due to animal disease and rose about 8% YoY on average during the year. In the first five months of 2019, indications are that DOC and Broiler chicken prices are about 5-6% lower YoY but egg prices are about 18% higher YoY.

In Indonesia, selling prices (based on publicly available data) rebounded in 2018 from weakness in 2017, and average Broiler DOC and chicken prices were 16% and 32% higher YoY during the year. In the first five months of 2019, Broiler chicken prices are about 11% lower YoY, but DOC prices are still about 25% higher YoY. Broiler chicken prices may be supported in the near term by culling activity, in our view. In the medium term, the Government's decision to lift the grandparent stock import quota by 11% for 2019 could add to medium term supply and soften prices.

In Vietnam, poultry prices improved in 2018 and were up approximately 10% YoY amid the recovery in swine prices, which suffered in the previous two years when China restricted swine imports from Vietnam. Prices in the first five months of 2019 have generally been softer YoY by about 4%, by our estimates. African swine fever from China has spread to Vietnam and according to recent press reports, has spread to farms in 58 of the country's 63 provinces, and resulted in the culling of more than 2.5m swine to-date. The effects have yet to be felt on chicken prices, but this could still be a potential price catalyst, in our view.

Primary cost components & profit margins

We forecast an improvement in the group's EBIT margin to 9.4% in FY21 from 8.0% in FY18, driven by: (i) revenue growth, (ii) relatively stable raw material costs and (iii) the replacement of contract farms with owned farms, which allows management to better control quality and improve efficiencies.

Leong Hup's primary cost components and our assumptions are detailed below, with inventory and employee costs accounting for about 78% of total revenue. Inventory costs comprise mainly the purchase of raw materials such as corn, soybean meal, packaging materials, vitamins, livestock feed additives, animal vaccines, GPS DOCs and PS DOCs.

YE: Dec (MYR'm)	2017	2018	2019E	2020E	2021E
EBIT margin	7.0%	8.0%	9.2%	9.2%	9.4%
Cost components					
Inventory costs	(3,835)	(4,042)	(4,253)	(4,484)	(4,784)
Employee costs	(504)	(524)	(552)	(617)	(677)
Dep'n/amortization	(199)	(197)	(216)	(235)	(251)
Utilities	(131)	(137)	(135)	(147)	(158)
Maintenance costs	(62)	(74)	(76)	(81)	(86)
Transport	(80)	(91)	(84)	(90)	(99)
Other expenses	(346)	(358)	(328)	(389)	(432)
As % of revenue					
Inventory costs	70%	70%	69 %	68%	67%
Employee costs	9 %	9 %	9 %	9 %	10%
Dep'n/amortization	4%	3%	4%	4%	4%
Utilities costs	2%	2%	2%	2%	2%
Maintenance costs	1%	1%	1%	1%	1%
Transport costs	1%	2%	1%	1%	1%
Other expenses	6%	6%	5%	6%	6%

Profit margins & cost components

Source: Company data, Maybank KE

By our estimates, corn and soybean meal account for about 19% and 18% of total inventory cost, with livestock costs making up the balance. Our FY19 forecast assumes a 5% YoY increase in average corn prices and stable soybean meal prices.

Corn prices have spiked in recent weeks due to delayed planting caused by wet weather and the risk is that this could prolong. Nevertheless, as we understand, Leong Hup typically buys forward by about 2-3 months so we would expect a lagged effect. Moreover, raw material cost increases are typically passed through in the form of livestock price increases, given that feed profit is typically cost plus in nature. Currency wise, our forecasts assume an average USD/MYR of 4.14 in FY19 versus 4.04 in FY18 and 4.26 in FY17.

Corn & soybean meal prices (USD/bushel)

· · · ·		,			
YE: Dec (USD/bushel)	2017	2018	2019E	2020E	2021E
Corn	3.59	3.68	3.87	3.87	3.87
Soybean	9.76	9.32	9.32	9.32	9.32
USD/MYR	4.26	4.04	4.14	4.14	4.14
Source: Pleamberg Maube	nek KE				

Source: Bloomberg, Maybank KE

Tax rates distorted by deferred tax

Leong Hup's effective tax rate was a low 15% in FY17 due to the recognition of MYR29m worth of deferred tax credits, the bulk of which related to tax incentives given to PT Malindo by the Ministry of Finance in Indonesia for conducting the revaluation of certain asset classes. The higher tax rate of 29% in FY18 takes into consideration the reversal of some of these deferred tax credits. Moving forward, we have imputed a more normalized effective tax rate of 22.5%, which is lower than Malaysia's corporate tax rate of 24% due to ongoing tax incentives in Vietnam from capacity expansion.

3-year core net profit CAGR of 14%

Taking the above assumptions and estimates into consideration, we expect earnings growth to be robust over the next two years, projecting core net profit growth of 16% in FY19 (1Q19: +15% YoY) and 13% in FY20 and 21 respectively. This translates to a 3-year core net profit CAGR of 14%. The variance between our FY18 reported and core net profit of MYR38.7m was due to one-off expenses incurred in FY18. These include, among others, a one-off provision relating to a dispute between Malindo Feedmill and the Indonesian Directorate General of Customs and Excise on the qualification of VAT exemption, and an accrual for IPO expenses.

30% dividend payout

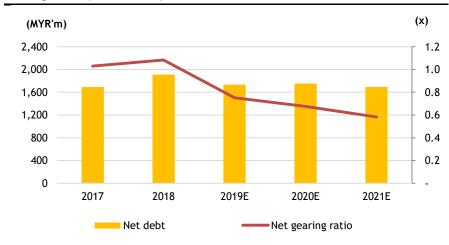
Leong Hup's management targets a dividend payout ratio of 30% (of net profit) moving forward and this is what we have assumed in our forecasts.

Capex plans

Leong Hup's capex was about MYR400m in FY18 and we expect capex to average MYR400m-MYR410m per annum between FY19 and FY21. Feedmill capacity expansion aside, capex will also be spent on new Broiler and Layer farms across the regional countries, with the aim of (i) replacing contract farms with the group's own farms as well as (ii) substituting open farms with closed farms.

Borrowings

Leong Hup's total debt as at end-Dec 2018 stood at MYR1.9b, with a net gearing ratio of 1.1x. We estimate a lower net gearing ratio of 0.8x end-2019.



Gearing levels (FY17-FY21E)

Source: Company, Maybank KE

Exchange rates and sensitivity

The table below sets out the average exchange rate (against the MYR) assumptions that we have used in our forecasts.

Average exchange rates (FY17-FY21E)

Avg for FY	2017	2018	2019E	2020E	2021E
USD	4.26	4.04	4.14	4.14	4.14
SGD	3.11	2.99	2.97	2.97	2.97
IDR	3,132	3,527	3,300	3,300	3,300
VND	5.31	5.70	5.80	5.80	5.80
PHP	11.78	13.06	12.70	12.70	12.70

Source: Company, Maybank KE

The diversity of operations lends some stability to earnings. The sensitivity of the group's net profit to fluctuations in key exchange rates, as laid out in the prospectus, is as per the table below.

Net profit sensitivity to forex fluctuations (FY15-10M18)

	•	•	•	
MYR	2015	2016	2017	10M18
5% strength	(0.5%)	0.1%	0.2%	0.1%
5% weakness	0.5%	(0.1%)	(0.2%)	(0.1%)
SGD				
5% strength	0.8%	0.1%	0.0%	0.2%
5% weakness	(0.8%)	(0.1%)	0.0%	(0.2)%
USD				
5% strength	0.3%	(1.8%)	(0.7%)	(1.9%)
5% weakness	(0.3%)	1.8%	0.7%	1.9%
IDR				
5% strength	0.1%	0.0%	0.0%	0.0%
5% weakness	(0.1%)	0.0%	0.0%	0.0%

Valuations

Favouring a PER valuation methodology

With the expansion plans that it has in the pipeline, we project robust earnings growth for Leong Hup in the near future, with a projected 3-year core net profit CAGR of 14%. Taking this growth trajectory into consideration, we believe that a PER valuation methodology would be the most appropriate to value the stock.

Target price of MYR1.37

In deriving our target price of MYR1.37 for Leong Hup, we have pegged its earnings to the 2020 weighted average PER of its regional peers of 17x. This basket comprises five listed poultry/livestock companies in ASEAN. We have excluded valuations of its domestic peer, QL Resources, as only 40% of the latter's earnings is derived from the livestock business.

Leong Hup's 2-year (FY18-FY20E) net profit CAGR of 14.3% compares favourably against its regional peer average of 13.4%, as does its PEG of just 1x at the current share price of MYR1.04, relative to its peer average of 1.4x.

The target PER multiple of 17x implies an 11% discount to CP Foods which, based on the forecasts of MKE's Thai consumer analyst, trades at a prospective FY20E PER of 19x. CP Food's premium largely reflects its larger market cap and its estimated 2-year (FY18-20E) net profit CAGR of 27% versus 14% for Leong Hup (based on our estimates).

Between CP Foods and Japfa, CP Foods is a better regional comparable to Leong Hup, in our view. Japfa's revenue contributions are not as geographically diversified and more susceptible to single country risk, since more than 65% of Japfa's revenue is derived from Indonesia. Moreover, its 2-year forward net profit CAGR averages just 2% (based on consensus).

Stock	Shr px *	Mkt cap	PER (x)	PER (x)	P/B (x)	P/B (x)	2-yr CAGR	2-yr PEG	ROAE (%)	ROAE (%)	Net yield (%)
	(Local)	(MYR)	CY19F	CY20F	CY19F	CY20F	(%)	(x)	CY19F	CY20F	CY19F
Leong Hup	1.04	3,796	14.6	12.9	2.2	1.9	14.3	1.0	17.0	15.8	2.1
CP Foods ^	28.50	32,470	22.4	19.3	1.4	1.3	27.5	0.8	7.6	8.2	2.4
CP Indo	4,450	21,060	19.3	17.5	3.4	3.0	(4.2)	(4.6)	18.3	17.8	2.3
Japfa Ltd	0.56	3,112	7.9	7.3	0.7	0.7	2.3	3.5	11.5	11.3	2.0
Japfa Comfeed	1,465	4,958	9.3	8.3	1.5	1.4	(2.0)	(4.6)	16.8	17.5	3.3
GFPT	17.00	2,820	14.9	13.7	1.6	1.5	22.4	0.7	10.6	10.7	1.9
Regional wtd avg		64,420	19.3	17.0	2.0	1.8	13.4	1.4	12.1	12.3	2.4

Regional and domestic peer comparisons

* Prices as at 21 June 2019, Leong Hup price as at 24 June 2019

Source: Bloomberg, Maybank KE

^ CP Foods forecast based on Maybank KE's estimates

Key risk factors

Obtaining proper business certifications

Leong Hup is still in the midst of obtaining the relevant Certificate of Complete and Compliance (CCC) for the right to occupy any building or part thereof for all its 137 farms and hatcheries in Malaysia. Similarly, in Indonesia, local regulations require a Certificate of Feasible Function for the right to occupy and utilise a building but as of Mar 2019, 70 of the buildings under Malindo Group have yet to obtain proper land use certification. Without proper compliance to certification requirements, Leong Hup's Malaysian and Indonesian operations are at the risk of being halted with possible penalties.

Interruptions in breeding stock supply

Leong Hup imports its entire Broiler breeding stock (GPS DOCs) from its suppliers, Cobb-Vantress and Aviagen. Given the limited number of breeders available worldwide, if either Cobb-Vantress or Aviagen is unable to supply GPS DOCs to Leong Hup for commercial reasons or because of an adverse event in their own businesses, this could adversely affect the group's smooth supply of GPS DOCs which in turn, will slow its supply of PS DOCs for its breeding business, ultimately causing delays to its entire supply chain.

Livestock disease outbreak

An outbreak of livestock disease (eg. Avian Influenza) in any of the group's operating countries could be detrimental to profitability as all the birds within an infected area must be culled to ensure that the virus remains in the containment zone. Additionally, any disease outbreak could affect consumer sentiment, decreasing demand for poultry food products for an extended period of time as a precautionary measure. Leong Hup does not have insurance coverage against losses resulting from livestock disease as such policies are scarce and not customary in its country of operations.

Raw material price volatility

Corn and soybean meal are commodities that are heavily used in the feedmill business. Leong Hup imports the majority of both its corn and soybean meal requirements. Hence, as both corn and soybean meal is traded on the international market, it is vital for management to monitor fluctuations in price and availability to manage its raw material costs.

Dependence on foreign workers

Poultry farming is labour intensive. As at 30 Jun 2018, 49.8% of Leong Hup's employees in Malaysia were foreign workers from Indonesia, Nepal and Bangladesh while 56.6% employees in Singapore were from Malaysia, China and Indonesia. Day-to-day operations may be disrupted should there be any changes in labour regulations or difficulties in recruiting foreign workers.

Interests of controlling shareholder

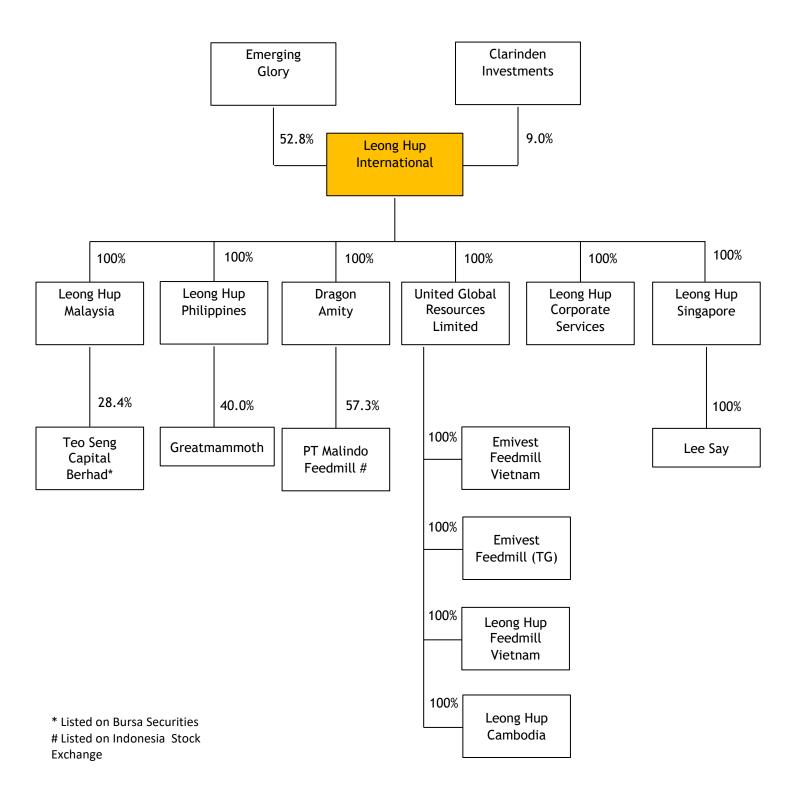
Emerging Glory is a controlling shareholder and through its ability to influence the election of Leong Hup's Directors, it will have control over matters concerning the group. There is no guarantee that its interests would be aligned with those of other shareholders of the group.

FY17A	FY18A	FY19E	FY20E	FY21E
na	na	14.6	12.9	11.5
na	na	14.6	12.9	11.5
na	na	2.2	1.9	1.7
na	na	2.3	2.0	1.8
na	na	2.1	2.3	2.6
				4.7
				6.8
15.5				9.3
5,501.4	5,746.6	6,136.9	6,600.3	7,093.9
912.6				1,280.3
583.1			-	918.8
				(244.0)
, ,	. ,	, ,	. ,	(7.2)
, ,	. ,	. ,	. ,	667.6
				(134.5)
, ,	. ,	, ,	. ,	(134.3) 0.7
				533.7
				(120.1)
, ,	. ,	, ,	. ,	(120.1)
, ,	. ,			330.6
				330.6
172.0	224.7	200.2	273.7	550.0
502 4	458.9	763 1	1 025 4	1,366.9
				804.1
				732.9
				0.0
				2,749.1
		-		96.4
				1.7
				1,048.5
				6,799.7
•				1,800.6
				345.9
				0.0
				1,260.7
		-	-	484.0
				3,891.1
•	,			2,196.0
				712.6
				2,908.6
				6,799.7
-,-//.5	4,054.0	3,341.0	0,125.0	0,777.7
797 3	348.6	445 9	483 በ	533.7
				251.2
				(120.1)
				(120.1)
				577.3 (400.0)
				(400.0)
				177.3
				(99.2)
				0.0
		1.74 2	79.7 9	
562.8 (137.4)	178.1 (63.6)	124.7 (18.6)	282.8 (19.4)	282.8 (19.4)
	na na na na 10.2 15.5	na<	nanana14.6nanana14.6nanana2.2nanana2.3nanana2.1nanana0.010.29.47.815.513.510.85,501.45,746.66,136.9912.61,005.81,113.3583.1654.6778.0(189.1)(189.9)(208.7)(10.0)(7.2)(7.2)384.0457.5562.1(92.2)(109.5)(116.8)0.50.60.6292.3348.6445.9(44.9)(101.8)(100.3)(54.8)(60.6)(85.3)192.6186.2260.2192.6224.9260.2192.6224.9260.2192.6224.9260.2192.6224.9260.2192.6224.9260.2192.6224.9260.2106.597.397.01.61.71.7740.3834.5928.24,477.54,834.05,541.81,419.11,326.61,465.4242.2248.9301.60.00.00.0774.41,044.31,030.3400.0449.0436.02,835.53,068.63,233.81,185.61,301.81,759.0456.4463.6548.91,642.01,765.42,307.9 </td <td>na na na 14.6 12.9 na na na 14.6 12.9 na na 2.2 1.9 na na 2.3 2.0 na na 2.3 2.0 na na 2.1 2.3 na na 0.0 2.3 10.2 9.4 7.8 7.3 15.5 13.5 10.1 10.1 5,501.4 5,746.6 6,136.9 6,600.3 912.6 1,005.8 1,113.3 1,190.6 583.1 654.6 778.0 844.0 (189.1) (189.9) (208.7) (227.8) (10.0) (7.2) (7.2) (7.2) 0.5 0.6 0.6 0.7 292.3 348.6 445.9 483.0 (44.9) (101.8) (100.3) (108.7) 192.6 186.2 260.2 293.7 192.6 186.2</td>	na na na 14.6 12.9 na na na 14.6 12.9 na na 2.2 1.9 na na 2.3 2.0 na na 2.3 2.0 na na 2.1 2.3 na na 0.0 2.3 10.2 9.4 7.8 7.3 15.5 13.5 10.1 10.1 5,501.4 5,746.6 6,136.9 6,600.3 912.6 1,005.8 1,113.3 1,190.6 583.1 654.6 778.0 844.0 (189.1) (189.9) (208.7) (227.8) (10.0) (7.2) (7.2) (7.2) 0.5 0.6 0.6 0.7 292.3 348.6 445.9 483.0 (44.9) (101.8) (100.3) (108.7) 192.6 186.2 260.2 293.7 192.6 186.2

FYE 31 Dec	FY17A	FY18A	FY19E	FY20E	FY21E
Key Ratios					
Growth ratios (%)					
Revenue growth	4.6	4.5	6.8	7.6	7.5
EBITDA growth	(9.8)	12.3	18.9	8.5	8.9
EBIT growth	(14.6)	19.1	22.9	8.3	9.6
Pretax growth	(15.8)	19.3	27.9	8.3	10.5
Reported net profit growth	5.5	(3.3)	39.8	12.8	12.6
Core net profit growth	5.5	16.8	15.7	12.8	12.6
Profitability ratios (%)					
EBITDA margin	10.6	11.4	12.7	12.8	13.0
EBIT margin	7.0	8.0	9.2	9.2	9.4
Pretax profit margin	5.3	6.1	7.3	7.3	7.5
Payout ratio	0.0	0.0	30.0	30.0	30.0
DuPont analysis					
Net profit margin (%)	3.5	3.2	4.2	4.4	4.7
Revenue/Assets (x)	1.2	1.2	1.1	1.1	1.0
Assets/Equity (x)	3.8	3.7	3.2	3.1	3.1
ROAE (%)	15.4	15.0	17.0	15.8	15.9
ROAA (%)	4.4	4.8	5.0	5.0	5.1
Liquidity & Efficiency					
Cash conversion cycle	57.8	60.8	63.1	63.1	63.1
Days receivable outstanding	35.7	38.0	39.5	39.5	39.5
Days inventory outstanding	41.7	41.5	43.4	43.4	43.4
Days payables outstanding	19.6	18.6	19.7	19.7	19.7
Dividend cover (x)	nm	nm	3.3	3.3	3.3
Current ratio (x)	1.1	1.2	1.3	1.4	1.5
Leverage & Expense Analysis					
Asset/Liability (x)	1.6	1.6	1.7	1.7	1.7
Net gearing (%) (incl perps)	103.0	108.3	75.1	67.6	58.3
Net gearing (%) (excl. perps)	103.0	108.3	75.1	67.6	58.3
Net interest cover (x)	4.2	4.2	4.8	4.8	5.0
Debt/EBITDA (x)	3.8	3.6	3.2	3.3	3.3
Capex/revenue (%)	5.0	6.9	6.7	6.1	5.6
Net debt/ (net cash)	1,691.1	1,912.1	1,732.6	1,753.1	1,694.4
	.,	.,,	.,	.,,	.,

Source: Company; Maybank

Appendix 1: Corporate Structure



Appendix 2: Board of Directors

Name	Designation	Profile
Lau Chia Nguang (age: 67 years)	Executive Chairman	Mr Lau Chia Nguang has over 40 years of experience and expertise in the integrated livestock industry. He was responsible for the Group's Broiler business in Malaysia from 1985 to 2002 and led the expansion of Leong Hup's poultry business into Indonesia in 1996. He founded Malindo Feedmill in 1997, which was subsequently was listed on the Jakarta Stock Exchange (now known as Indonesia Stock Exchange) in 2006. He served as President Director of Malindo Feedmill's from 2014 to 2018 and he is currently the President Commissioner of Malindo Feedmill.
Dato' Lau Eng Guang (age: 64 years)	Non- Independent Executive Director	Dato' Lau Eng Guang has over 40 years of experience and expertise in the integrated livestock industry. He is presently responsible for the Group's business strategies and risk management. He has served as a director in both Leong Hup and Emivest since 1989 and 2002 respectively.
Tan Sri Lau Tuang Nguang (age 60)	Non- Independent Executive Director	Tan Sri Lau Tuang Nguang has over 35 years of experience and expertise in the integrated livestock industry. He is the Group's CEO and he oversees the entire business operations of the group regionally. He is currently President Director of Malindo Feedmill and he sits as a panel member of the National Agriculture Advisory Council to the Ministry of Agriculture.
Lau Joo Hong (age: 48 years)	Non- Independent Executive Director	Mr Lau Joo Hong is the Chief Executive Officer of the Group's Vietnam operations. He has over 20 years of experience and expertise in the integrated livestock industry and retail market. Mr Lau Joo Hong played a critical role in planning and executing the Group's venture into Vietnam's poultry business in 2007. He led the Vietnam operations as Deputy CEO until his promotion to CEO in 2014.
Lau Joo Han (age: 44 years)	Non- Independent Executive Director	Mr Lau Joo Han graduated with a degree in International Trade from Victoria University, Melbourne, Australia in 1999. He has over 19 years of experience in the livestock industry. He began his career at Leong Hup in the marketing and operations division before rising to the CEO position in Leong Hup Malaysia (LHM) in 2014. He was appointed and has served as a director of LHM since 2014.
Lau Joo Keat (age: 39 years)	Non- Independent Executive Director	Mr Lau Joo Keat has a Bachelor of Marketing from the University of Kentucky, United States. He as about 16 years of experience and expertise in the integrated livestock industry. He has served as a director of Malindo Feedmill since 2015 and has been the Country Head of the Group's Indonesian business since 2017.
Benny Lim Jew Fong (age: 46 years)	Non- Independent Non-Executive Director	Mr Benny Lim obtained a Bachelor of Commerce from Monash University, Australia and has been qualified as a Chartered Financial Analyst since 2001. He has worked at Southern Bank Berhad, DBS Bank Ltd and United Overseas Bank Ltd where he held various positions in corporate and investment banking before joining Affinity EPS in 2011. He is currently the Managing Director at Affinity EPS and was appointed to Leong Hup's Board in September 2014.
Mahani Binti Amat (age: 64 years)	Independent Non-Executive Director	Puan Mahani Binti Amat obtained her Bachelor of Economics, majoring in Business Administration, from University of Malaya in 1977. She has held various positions in the banking industry, and these included various senior management positions in RHB as head of premium banking, international division and with her last designation as Executive Vice President of operations and services. Puan Mahani was appointed to Leong Hup's Board on 1 August 2018. She is also an independent director for two public listed companies, Unisem (M) and Scicom (MSC).
Datin Paduka Rashidah Binti Ramli (age: 59 years)	Independent Non-Executive Director	Datin Paduka Rashidah obtained her Bachelor of Arts (Honours) in South East Asian Studies from University of Malaya, Kuala Lumpur in 1982. She began her career as an Administrative and Diplomatic Officer and served in several senior roles in the Ministry of Foreign Affairs, among them being the Southeast Asia Division, Development Division and Chief of Inspectorate. She was also posted to Singapore and Canada, and was Ambassador (in residence) to the Republic of Ecuador and the Republic of Colombia. In 2010, she was appointed as the Director General of the Southeast Asia Regional Centre for Counter-Terrorism, Ministry of Foreign Affairs until her retirement in 2017. She was appointed to Leong Hup's Board on 1 August 2018.
Chu Nyet Kim (age: 63 years)	Independent Non-Executive Director	Chu Nyet Kim obtained a Diploma in Accounting (Honours) from Algonquin College of Applied Arts and Technology in Canada. She is a Fellow member of the Association of Chartered Certified Accountants, UK and a member of the Malaysian Institute of Accountants. She joined Deloitte Indonesia in 1989 and was with the company for 27 years. She was a senior partner of Deloitte Southeast Asia Cluster before her retirement in 2016. She has been a Commissioner of PT PZ Cussons Indonesia since 2016, which is a subsidiary of PZ Cussons PLC, a company listed on the London Stock Exchange. She was appointed to Leong Hup's Board on 1 August 2018.

Appendix 2: Board of Directors (continued...)

Name	Designation	Profile
Goh Wen Ling (age: 39 years)	Independent Non- Executive Director	Goh Wen Ling graduated with a Bachelor of Laws (Honours) degree from University of Hull in 2000 and obtained her Postgraduate Diploma from City University London, Inns of Court School of Law in 2001. Her professional career began in 2002 at Messrs. Shook Lin & Bok, as an associate in the intellectual department. She has since accumulated over 14 years of working experience in the legal industry. She was appointed to Leong Hup's Board on 1 August 2018.
Low Han Kee (age: 59 years)	Independent Non- Executive Director	Mr Low has been a certified public accountant with the Malaysian Association of Certified Public Accountants since 1984. He began his career as an audit trainee at Ernst and Young and subsequently joined Mulpha International Berhad. In 1990 he joined Amway (Malaysia) Sdn Bhd and held various positions there until his appointment as Managing Director of Amway (Malaysia) Holdings Bhd from 1998 until his retirement in 2016. He was appointed to Leong Hup's Board on 1 August 2018.
Tay Tong Poh (age: 57 years)	Independent Non- Executive Director	Mr Tay obtained his Bachelor of Science in Electrical Engineering from the University of Southern California Viterbi School of Engineering, United States in 1984 and a Master of Business Administration (Finance) from the University of Chicago Booth School of Business, United States in 1986. He has 17 years of work experience in corporate banking, corporate finance, project finance, leveraged finance and debt capital markets in J.P Morgan Securities (Asia Pacific) Limited. Mr Tay subsequently joined United Overseas Bank Limited, Singapore as Head of Investment Banking and Executive Vice President from 2006-2001. In 2011, he joined Affinity EPS as managing director and Head of Portfolio Management but retired from Affinity EPS in June 2018. He was appointed to Leong Hup's Board on 1 August 2018.
Tee Yock Siong (age: 37 years)	Alternative Director to Benny Lim Jew Fong	Mr Tee holds a Bachelor of Business Management and a Bachelor of Science (Economics) from the Singapore Management University. He also obtained a Master of Business Administration from the Wharton School at University of Pennsylvania, United States in 2012. He has almost 12 years of work experience in private equity and corporate finance. He was with Temasek Holdings Pte Ltd between 2008 and 2010. He joined Affinity EPS in 2012 where he is now an executive director, in charge of originating, executing and managing investments for the company.

Source: Company

Appendix 3: Key Senior Management

Name	Designation	Profile
Tan Sri Lau Tuang Nguang (age: 60 years)	Group Chief Executive Officer / President Director of Malindo Feedmill	Tan Sri Lau Tuang Nguang has over 35 years of experience and expertise in the integrated livestock industry. He began his career in Leong Hup Poultry Farm Sdn Bhd in 1978 where he gained experience operating GPS and breeder farms. As the Group's CEO, he oversees the entire business operations of the Group covering Malaysia, Singapore, Indonesia, Vietnam and Philippines.
Lau Chia Nguang (age: 67 years)	Executive Chairman / President Commissioner of Malindo Feedmill	Mr Lau Chia Nguang has over 40 years of experience and expertise in the integrated livestock industry. He was responsible for the Group's Broiler business in Malaysia from 1985 to 2002 and led the expansion of Leong Hup's poultry business into Indonesia in 1996. He founded Malindo Feedmill in 1997, which was subsequently was listed on the Jakarta Stock Exchange (now known as Indonesia Stock Exchange) in 2006. He served as president director of Malindo Feedmill's from 2014 to 2018 and he is currently the President Commissioner of Malindo Feedmill.
Dato' Lau Eng Guang (age: 64 years)	Executive Director / Group's Business Strategist	Dato' Lau Eng Guang has over 40 years of experience and expertise in the integrated livestock industry. He is presently responsible for the Group's business strategies and risk management. He has served as a director in both Leong Hup and Emivest since 1989 and 2002 respectively.
Lau Joo Hong (age: 48 years)	Executive Director / CEO of the Group's Vietnam operations	Mr Lau Joo Hong is the Chief Executive Officer of the Group's Vietnam operations. He has over 20 years of experience and expertise in the integrated livestock industry and retail market. Mr Lau Joo Hong played a critical role in planning and executing the Group's venture into Vietnam's poultry business in 2007. He led the Vietnam operations as Deputy CEO until his promotion to CEO in 2014.
Lau Joo Han (age: 44 years)	Executive Director/ CEO of the Group's Malaysia operations	Mr Lau Joo Han graduated with a degree in International Trade from Victoria University, Melbourne, Australia in 1999. He has over 19 years of experience in the livestock industry. He began his career at Leong Hup in the marketing and operations division before rising to the CEO position in Leong Hup Malaysia (LHM) in 2014. He was appointed and has served as a director of LHM since 2014.
Lau Joo Keat (age: 39 years)	Executive Director / Country Head of the Group's Indonesian operations	Mr Lau Joo Keat has a Bachelor of Marketing from the University of Kentucky, United States. He as about 16 years of experience and expertise in the integrated livestock industry. He has served as a director of Malindo Feedmill since 2015 and has been the Country Head of the Group's Indonesian business since 2017.
Lau Jui Peng (age: 47 years)	Group Breeder Chief Executive Officer	Mr Lau Jiu Peng obtained a Bachelor's degree in Business Administration from the Hawaii Pacific University, United States. He began his career at Leong Hup Poultry Farm Sdn Bhd as the Head of breeder operation in 1999 and worked at various roles within the company before he was promoted to Chief Executive Officer in 2013.
Lau Joo Heng (age: 44 years)	CEO of the Group's Philippines operations	Mr Lau Joo Heng obtained a Bachelor and Master's degree in Finance from Western Michigan University in the United States. Mr Lau began his career as a Risk Management Officer at Arab- Malaysian Merchant Bank Berhad before he moved on to Evergrade Healthcare Products Sdn Bhd and The Baker's Cottage Sdn Bhd. Mr Lau joined the Group's livestock business in 2015 where he led the expansion of the livestock business to Philippines. He has since led the Group's Philippines operations.
Lau Joo Hwa (age: 40 years)	CEO of the Group's Singapore operations	After graduating from Victoria University, Melbourne, Australia with a Bachelor of Business, Mr Lau began his career as a marketing manager at Malindo Feedmill before rising to the Deputy Chief Officer position where he was in charge of marketing and overall administration. He was subsequently promoted to the CEO role of Singapore's operations in 2017.
Chew Eng Loke (age: 50 years)	Chief Financial Officer	Mr Chew holds a Bachelor of Economics from Monash University, Australia and a Master of Business Administration from University of Strathclyde, UK. He has previously held management and financial roles at Ayamas Food Corporation Berhad, Texchem Resources Berhad, Ogawa Berhad and AirAsia X Berhad etc. where he accumulated over 25 years of industry experience. He joined Leong Hup as Chief Financial Officer on 1 March 2015.

Source: Company

Research Offices

REGIONAL

Sadiq CURRIMBHOY Regional Head of Research & Economics (65) 6231 5836 sadiq@maybank-ke.com.sg

WONG Chew Hann, CA Regional Head of Institutional Research (603) 2297 8686 wchewh@maybank-ib.com

ONG Seng Yeow Regional Head of Retail Research (65) 6231 5839 ongsengyeow@maybank-ke.com.sg

ECONOMICS

Suhaimi ILIAS Chief Economist Malaysia | Philippines | China (603) 2297 8682 suhaimi ilias@maybank-ib.com

CHUA Hak Bin Regional Thematic Macroeconomist (65) 6231 5830 chuahb@maybank-ke.com.sg

LEE Ju Ye Singapore | Thailand (65) 6231 5844 leejuye@maybank-ke.com.sg

Linda LIU Singapore | Vietnam (65) 6231 5847 lindaliu@maybank-ke.com.sg

Dr Zamros DZULKAFLI (603) 2082 6818 zamros.d@maybank-ib.com

Ramesh LANKANATHAN (603) 2297 8685 ramesh@maybank-ib.com

FX Saktiandi SUPAAT Head of FX Research (65) 6320 1379

saktiandi@maybank.com.sg Christopher WONG (65) 6320 1347

wongkl@maybank.com.sg Tan Yanxi (65) 6320 1378 tanyx@maybank.com.sg

Fiona LIM (65) 6320 1374 fionalim@maybank.com.sg

STRATEGY

Sadiq CURRIMBHOY Global Strategist (65) 6231 5836 sadig@mavbank-ke.com.sg

Willie CHAN Hong Kong | Regional (852) 2268 0631 williechan@kimeng.com.hk

FIXED INCOME

Winson PHOON, ACA (65) 6812 8807 winsonphoon@maybank-ke.com.sg

Se Tho Mun Yi (603) 2074 7606 munyi.st@maybank-ib.com

MALAYSIA

WONG Chew Hann, CA Head of Research (603) 2297 8686 wchewh@maybank-ib.com • Strategy

Desmond CH'NG, ACA (603) 2297 8680 desmond.chng@maybank-ib.com • Banking & Finance

LIAW Thong Jung (603) 2297 8688 tjliaw@maybank-ib.com • Oil & Gas Services- Regional

ONG Chee Ting, CA (603) 2297 8678 ct.ong@maybank-ib.com • Plantations - Regional

Mohshin AZIZ (603) 2297 8692 mohshin.aziz@maybank-ib.com • Aviation - Regional • Petrochem

YIN Shao Yang, CPA (603) 2297 8916 samuel.y@maybank-ib.com • Gaming - Regional • Media

TAN Chi Wei, CFA (603) 2297 8690 chiwei.t@maybank-ib.com • Power • Telcos

WONG Wei Sum, CFA (603) 2297 8679 weisum@maybank-ib.com • Property

LEE Yen Ling (603) 2297 8691 lee.yl@maybank-ib.com • Glove • Ports • Shipping • Healthcare

Ivan YAP (603) 2297 8612 ivan.yap@maybank-ib.com • Automotive • Semiconductor • Technology

Kevin WONG (603) 2082 6824 kevin.wong@maybank-ib.com • REITs • Consumer Discretionary

Adrian WONG, CFA (603) 2297 8675 adrian.wkj@maybank-ib.com • Constructions

Jade TAM (603) 2297 8687 jade.tam@maybank-ib.com • Consumer Staples

Mohd Hafiz HASSAN (603) 2082 6819 mohdhafiz.ha@maybank-ib.com • Building Materials • Small & Mid Caps

Amirah AZMI (603) 2082 8769 amirah.azmi@maybank-ib.com • Media • Plantations

TEE Sze Chiah Head of Retail Research (603) 2082 6858 szechiah.t@maybank-ib.com

Nik Ihsan RAJA ABDULLAH, MSTA, CFTe (603) 2297 8694 nikmohdihsan.ra@maybank-ib.com SINGAPORE

Neel SINHA Head of Research (65) 6231 5838 neelsinha@maybank-ke.com.sg • Strategy • Industrials • SMID Caps - Regional

CHUA Su Tye (65) 6231 5842 chuasutye@maybank-ke.com.sg • REITs

Luis HILADO (65) 6231 5848 luishilado@maybank-ke.com.sg • Telcos • Transport

LAI Gene Lih, CFA (65) 6231 5832 laigenelih@maybank-ke.com.sg • Technology • Healthcare

Thilan WICKRAMASINGHE (65) 6231 5840 thilanw@maybank-ke.com.sg • Banks

SZE Jia Min (65) 6231 5845 jiamin@maybank-ke.com.sg • Consumer

INDIA

Jigar SHAH Head of Research (91) 22 4223 2632 jigar@maybank-ke.co.in • Strategy • Oil & Gas • Automobile • Cement Neerav DALAL

(91) 22 4223 2606 neerav@maybank-ke.co.in • Software Technology • Telcos

Vishal PERIWAL (91) 22 4223 2605 vishalperiwal@maybank-ke.co.in • Infrastructure

Kshitiz PRASAD (91) 22 4223 2607 kshitiz@maybank-ke.co.in • Banks

INDONESIA

Isnaputra ISKANDAR Head of Research (62) 21 8066 8680 isnaputra.iskandar@maybank-ke.co.id • Strategy • Metals & Mining • Cement

Rahmi MARINA (62) 21 8066 8689 rahmi.marina@maybank-ke.co.id

Banking & Finance

Aurellia SETIABUDI
(62) 21 8066 8691
aurellia.setiabudi@maybank-ke.co.id
 Property

Janni ASMAN (62) 21 8066 8687 janni.asman@maybank-ke.co.id • Cigarette • Healthcare • Retail

Luthfi RIDHO (62) 21 8066 8690 luthfi.ridho@maybank-ke.co.id • Economics

PHILIPPINES

Minda OLONAN Head of Research (63) 2 849 8840 minda_olonan@maybank-atrke.com • Strategy • Conglomerates

Katherine TAN (63) 2 849 8843 kat_tan@maybank-atrke.com • Banks • Conglomerates • Ports

Luis HILADO (65) 6231 5848 luishilado@maybank-ke.com.sg • Telcos

Romel LIBO-ON (63) 2 849 8844 romel_libo-on@maybank-atrke.com • Property

Kayzer LLANDA (63) 2 849 8839 Kayzer_llanda@maybank-atrke.com • Utilities

THAILAND

Maria LAPIZ Head of Institutional Research Dir (66) 2257 0250 | (66) 2658 6300 ext 1399 Maria.L@maybank-ke.co.th • Strategy • Consumer • Materials • Services

Teerapol Udomvej, CFA (66) 2658 6300 ext 1394 teerapol U@maybank-ke co th

teerapol.U@maybank-ke.co.th • Healthcare Ekachai TARAPORNTIP Head of Re

Ekachai TARAPORNTIP Head of Retail Research (66) 2658 5000 ext 1530 Ekachai.t@maybank-ke.co.th

Sutthichai KUMWORACHAI Deputy Head (66) 2658 5000 ext 1400

sutthichai.k@maybank-ke.co.th • Energy • Petrochem

Surachai PRAMUALCHAROENKIT (66) 2658 5000 ext 1470 Surachai p@maybank-ke co th

Vurachai.p@maybank-ke.co.th • Auto • Conmat • Contractor • Steel Suttatip PEERASUB (66) 2658 5000 ext 1430 suttatip.p@maybank-ke.co.th • Media • Commerce

Media • Commerce
Termporn TANTIVIVAT
(66) 2658 5000 ext 1520
termporn.t@maybank-ke.co.th

• Property Jaroonpan WATTANAWONG (66) 2658 5000 ext 1404

(a) Loss Social Hank-ke.co.th
 Transportation • Small cap
 Thanatphat SUKSRICHAVALIT
 (66) 2658 5000 ext 1401
 thanaphat.s@maybank-ke.co.th

Media • Electronics
 Sorrabhol VIRAMETEEKUL
 Head of Digital Research
 (66) 2658 5000 ext 1550

sorrabhol.V@maybank-ke.co.th • Food, Transportation

Wijit ARAYAPISIT (66) 2658 5000 ext 1450 wijit.a@maybank-ke.co.th • Strategist

Kritsapong PATAN (66) 2658 5000 ext 1310 kritsapong.p@maybank-ke.co.th • Chartist Apisit PATTARASAKOLKIAT

(66) 2658 5000 ext 1405 Apisit.p@maybank-ke.co.th • Chartist

VIETNAM

LE Hong Lien, ACCA Head of Institutional Research (84 28) 44 555 888 x 8181 lien.le@maybank-kimeng.com.vn • Strategy • Consumer • Diversified

LE Nguyen Nhat Chuyen (84 28) 44 555 888 x 8082 chuyen.le@maybank-kimeng.com.vn • Oil & Gas

QUAN Trong Thanh (84 28) 44 555 888 x 8184 thanh.quan@maybank-kimeng.com.vn • Banks

NGUYEN Thi Ngan Tuyen Head of Retail Research (84 28) 44 555 888 x 8081 tuyen.nguyen@maybank-kimeng.com.vn • Food & Beverage • Oil&Gas • Banking

TRUONG Quang Binh Deputy Head of Retail Research (84 28) 44 555 888 x 8087 binh.truong@maybank-kimeng.com.vn • Rubber Plantation • Tyres & Tubes • Oil & Gas

TRINH Thi Ngoc Diep (84 28) 44 555 888 x 8208 diep.trinh@maybank-kimeng.com.vn • Technology • Utilities • Construction

NGUYEN Thi Sony Tra Mi (84 28) 44 555 888 x 8084 mi.nguyen@maybank-kimeng.com.vn • Port Operation • Pharmaceutical • Food & Beverage

NGUYEN Thanh Lam (84 28) 44 555 888 x 8086 thanhlam.nguyen@maybank-kimeng.com.vn • Technical Analysis

APPENDIX I: TERMS FOR PROVISION OF REPORT, DISCLAIMERS AND DISCLOSURES

DISCLAIMERS

This research report is prepared for general circulation and for information purposes only and under no circumstances should it be considered or intended as an offer to sell or a solicitation of an offer to buy the securities referred to herein. Investors should note that values of such securities, if any, may fluctuate and that each security's price or value may rise or fall. Opinions or recommendations contained herein are in form of technical ratings and fundamental ratings. Technical ratings may differ from fundamental ratings as technical valuations apply different methodologies and are purely based on price and volume-related information extracted from the relevant jurisdiction's stock exchange in the equity analysis. Accordingly, investors' returns may be less than the original sum invested. Past performance is not necessarily a guide to future performance. This report is not intended to provide personal investment advice and does not take into account the specific investment objectives, the financial situation and the particular needs of persons who may receive or read this report. Investors should therefore seek financial, legal and other advice regarding the appropriateness of investing in any securities or the investment strategies discussed or recommended in this report.

The information contained herein has been obtained from sources believed to be reliable but such sources have not been independently verified by Maybank Investment Bank Berhad, its subsidiary and affiliates (collectively, "MKE") and consequently no representation is made as to the accuracy or completeness of this report by MKE and it should not be relied upon as such. Accordingly, MKE and its officers, directors, associates, connected parties and/or employees (collectively, "Representatives") shall not be liable for any direct, indirect or consequential losses or damages that may arise from the use or reliance of this report. Any information, opinions or recommendations contained herein are subject to change at any time, without prior notice.

This report may contain forward looking statements which are often but not always identified by the use of words such as "anticipate", "believe", "estimate", "intend", "plan", "expect", "forecast", "predict" and "project" and statements that an event or result "may", "will", "can", "should", "could" or "might" occur or be achieved and other similar expressions. Such forward looking statements are based on assumptions made and information currently available to us and are subject to certain risks and uncertainties that could cause the actual results to differ materially from those expressed in any forward looking statements. Readers are cautioned not to place undue relevance on these forward-looking statements. MKE expressly disclaims any obligation to update or revise any such forward looking statements to reflect new information, events or circumstances after the date of this publication or to reflect the occurrence of unanticipated events.

MKE and its officers, directors and employees, including persons involved in the preparation or issuance of this report, may, to the extent permitted by law, from time to time participate or invest in financing transactions with the issuer(s) of the securities mentioned in this report, perform services for or solicit business from such issuers, and/or have a position or holding, or other material interest, or effect transactions, in such securities or options thereon, or other investments related thereto. In addition, it may make markets in the securities mentioned in the material presented in this report. One or more directors, officers and/or employees of MKE may be a director of the issuers of the securities mentioned in this report to the extent permitted by law.

This report is prepared for the use of MKE's clients and may not be reproduced, altered in any way, transmitted to, copied or distributed to any other party in whole or in part in any form or manner without the prior express written consent of MKE and MKE and its Representatives accepts no liability whatsoever for the actions of third parties in this respect.

This report is not directed to or intended for distribution to or use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation. This report is for distribution only under such circumstances as may be permitted by applicable law. The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. Without prejudice to the foregoing, the reader is to note that additional disclaimers, warnings or qualifications may apply based on geographical location of the person or entity receiving this report.

Malaysia

Opinions or recommendations contained herein are in the form of technical ratings and fundamental ratings. Technical ratings may differ from fundamental ratings as technical valuations apply different methodologies and are purely based on price and volume-related information extracted from Bursa Malaysia Securities Berhad in the equity analysis.

Singapore

This report has been produced as of the date hereof and the information herein may be subject to change. Maybank Kin Eng Research Pte. Ltd. ("Maybank KERPL") in Singapore has no obligation to update such information for any recipient. For distribution in Singapore, recipients of this report are to contact Maybank KERPL in Singapore in respect of any matters arising from, or in connection with, this report. If the recipient of this report is not an accredited investor, expert investor or institutional investor (as defined under Section 4A of the Singapore Securities and Futures Act), Maybank KERPL shall be legally liable for the contents of this report, with such liability being limited to the extent (if any) as permitted by law.

Thailand

Except as specifically permitted, no part of this presentation may be reproduced or distributed in any manner without the prior written permission of Maybank Kim Eng Securities (Thailand) Public Company Limited ("MBKET") accepts no liability whatsoever for the actions of third parties in this respect.

Due to different characteristics, objectives and strategies of institutional and retail investors, the research reports of MBKET Institutional and Retail Research Department may differ in either recommendation or target price, or both. MBKET Retail Research is intended for retail investors (http://kelive.maybank-ke.co.th) while Maybank Kim Eng Institutional Research is intended only for institutional investors based outside Thailand only.

The disclosure of the survey result 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 may be changed after that date. MBKET does not confirm nor certify the accuracy of such survey result.

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 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, MBKET does not confirm, verify, or certify the accuracy and completeness of the assessment result.

US

This third-party research report is distributed in the United States ("US") to Major US Institutional Investors (as defined in Rule 15a-6 under the Securities Exchange Act of 1934, as amended) only by Maybank Kim Eng Securities USA Inc ("Maybank KESUSA"), a broker-dealer registered in the US (registered under Section 15 of the Securities Exchange Act of 1934, as amended). All responsibility for the distribution of this report by Maybank KESUSA in the US shall be borne by Maybank KESUSA. This report is not directed at you if MKE is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that Maybank KESUSA is permitted to provide research material concerning investments to you under relevant legislation and regulations. All U.S. persons receiving and/or accessing this report and wishing to effect transactions in any security mentioned within must do so with: Maybank Kim Eng Securities USA Inc. 400 Park Avenue, 11th Floor, New York, New York 10022, 1-(212) 688-8886 and not with, the issuer of this report.

UK

This document is being distributed by Maybank Kim Eng Securities (London) Ltd ("Maybank KESL") which is authorized and regulated, by the Financial Conduct Authority and is for Informational Purposes only. This document is not intended for distribution to anyone defined as a Retail Client under the Financial Services and Markets Act 2000 within the UK. Any inclusion of a third party link is for the recipients convenience only, and that the firm does not take any responsibility for its comments or accuracy, and that access to such links is at the individuals own risk. Nothing in this report should be considered as constituting legal, accounting or tax advice, and that for accurate guidance recipients should consult with their own independent tax advisers.

DISCLOSURES

Legal Entities Disclosures

Malaysia: This report is issued and distributed in Malaysia by Maybank Investment Bank Berhad (15938- H) which is a Participating Organization of Bursa Malaysia Berhad and a holder of Capital Markets and Services License issued by the Securities Commission in Malaysia. Singapore: This report is distributed in Singapore by Maybank KERPL (Co. Reg No 198700034E) which is regulated by the Monetary Authority of Singapore. Indonesia: PT Maybank Kim Eng Securities ("PTMKES") (Reg. No. KEP-251/PM/1992) is a member of the Indonesia Stock Exchange and is regulated by the Financial Services Authority (Indonesia). Thailand: MBKET (Reg. No.0107545000314) is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission. Philippines: Maybank ATRKES (Reg. No.01-2004-00019) is a member of the Philippines Stock Exchange and is regulated by the Securities and Exchange Commission. Vietnam: Maybank Kim Eng Securities Limited (License Number: 117/GP-UBCK) is licensed under the State Securities Commission of Vietnam. Hong Kong; KESHK (Central Entity No AAD284) is regulated by the Securities and Futures Commission. India: Kim Eng Securities India Private Limited ("KESI") is a participant of the National Stock Exchange of India Limited and the Bombay Stock Exchange and is regulated by Securities and Exchange Board of India ("SEBI") (Reg. No. INZ 000010538). KESI is also registered with SEBI as Category 1 Merchant Banker (Reg. No. INM 000011708) and as Research Analyst (Reg No: INH000000057) US: Maybank KESUSA is a member of/ and is authorized and regulated by the FINRA - Broker ID 27861. UK: Maybank KESL (Reg No 2377538) is authorized and regulated by the Financial Conduct Authority.

Disclosure of Interest

Malaysia: MKE and its Representatives may from time to time have positions or be materially interested in the securities referred to herein and may further act as market maker or may have assumed an underwriting commitment or deal with such securities and may also perform or seek to perform investment banking services, advisory and other services for or relating to those companies.

Singapore: As of 25 June 2019, Maybank KERPL and the covering analyst do not have any interest in any companies recommended in this research report.

Thailand: MBKET may have a business relationship with or may possibly be an issuer of derivative warrants on the securities /companies mentioned in the research report. Therefore, Investors should exercise their own judgment before making any investment decisions. MBKET, its associates, directors, connected parties and/or employees may from time to time have interests and/or underwriting commitments in the securities mentioned in this report.

Hong Kong: As of 25 June 2019, KESHK and the authoring analyst do not have any interest in any companies recommended in this research report.

India: As of 25 June 2019, and at the end of the month immediately preceding the date of publication of the research report, KESI, authoring analyst or their associate / relative does not hold any financial interest or any actual or beneficial ownership in any shares or having any conflict of interest in the subject companies except as otherwise disclosed in the research report.

In the past twelve months KESI and authoring analyst or their associate did not receive any compensation or other benefits from the subject companies or third party in connection with the research report on any account what so ever except as otherwise disclosed in the research report.

MKE may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment and may receive compensation for the services provided from the companies covered in this report.

OTHERS

Analyst Certification of Independence

The views expressed in this research report accurately reflect the analyst's personal views about any and all of the subject securities or issuers; and no part of the research analyst's compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in the report.

Reminder

Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct its own analysis of the product and consult with its own professional advisers as to the risks involved in making such a purchase.

No part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without the prior consent of MKE.

Definition of Ratings

Maybank Kim Eng Research uses the following rating system

- BUY Return is expected to be above 10% in the next 12 months (excluding dividends)
- HOLD Return is expected to be between 10% to +10% in the next 12 months (excluding dividends)
- SELL Return is expected to be below -10% in the next 12 months (excluding dividends)

Applicability of Ratings

The respective analyst maintains a coverage universe of stocks, the list of which may be adjusted according to needs. Investment ratings are only applicable to the stocks which form part of the coverage universe. Reports on companies which are not part of the coverage do not carry investment ratings as we do not actively follow developments in these companies.

🌏 Malaysia

Maybank Investment Bank Berhad (A Participating Organisation of Bursa Malaysia Securities Berhad) 33rd Floor, Menara Maybank, 100 Jalan Tun Perak, 50050 Kuala Lumpur Tel: (603) 2059 1888; Fax: (603) 2078 4194

Stockbroking Business: Level 8, Tower C, Dataran Maybank, No.1, Jalan Maarof 59000 Kuala Lumpur Tel: (603) 2297 8888 Fax: (603) 2282 5136

Philippines

Maybank ATR Kim Eng Securities Inc. 17/F, Tower One & Exchange Plaza Ayala Triangle, Ayala Avenue Makati City, Philippines 1200

Tel: (63) 2 849 8888 Fax: (63) 2 848 5738

🌒 South Asia Sales Trading

Kevin Foy Regional Head Sales Trading kevinfoy@maybank-ke.com.sg Tel: (65) 6636-3620 US Toll Free: 1-866-406-7447

Indonesia Iwan Atmadjaja iatmadjaja2@bloomberg.net (62) 21 8066 8555

New York James Lynch jlynch@maybank-keusa.com Tel: (212) 688 8886

Philippines Keith Roy keith_roy@maybank-atrke.com Tel: (63) 2 848-5288

🌏 Singapore

Maybank Kim Eng Securities Pte Ltd Maybank Kim Eng Research Pte Ltd 50 North Canal Road Singapore 059304

Tel: (65) 6336 9090

Hong Kong

Kim Eng Securities (HK) Ltd 28/F, Lee Garden Three, 1 Sunning Road, Causeway Bay, Hong Kong

Tel: (852) 2268 0800 Fax: (852) 2877 0104

🌏 Thailand

Maybank Kim Eng Securities (Thailand) Public Company Limited 999/9 The Offices at Central World, 20th - 21st Floor, Rama 1 Road Pathumwan, Bangkok 10330, Thailand

Tel: (66) 2 658 6817 (sales) Tel: (66) 2 658 6801 (research)

👩 North Asia Sales Trading

Andrew Lee andrewlee@kimeng.com.hk Tel: (852) 2268 0283 US Toll Free: 1 877 837 7635

London Greg Smith gsmith@maybank-ke.co.uk Tel: (44) 207-332-0221

India Sanjay Makhija sanjaymakhija@maybank-ke.co.in Tel: (91)-22-6623-2629

🐔 London

Maybank Kim Eng Securities (London) Ltd PNB House 77 Queen Victoria Street London EC4V 4AY, UK

Tel: (44) 20 7332 0221 Fax: (44) 20 7332 0302

🌏 Indonesia

PT Maybank Kim Eng Securities Sentral Senayan III, 22nd Floor Jl. Asia Afrika No. 8 Gelora Bung Karno, Senayan Jakarta 10270, Indonesia

Tel: (62) 21 2557 1188 Fax: (62) 21 2557 1189

🌏 Vietnam

Maybank Kim Eng Securities Limited 4A-15+16 Floor Vincom Center Dong Khoi, 72 Le Thanh Ton St. District 1 Ho Chi Minh City, Vietnam

Tel : (84) 844 555 888 Fax : (84) 8 38 271 030

🔊 New York

Maybank Kim Eng Securities USA Inc 400 Park Avenue, 11th Floor New York, New York 10022, U.S.A.

Tel: (212) 688 8886 Fax: (212) 688 3500

🌏 India

Kim Eng Securities India Pvt Ltd 2nd Floor, The International, 16, Maharishi Karve Road, Churchgate Station, Mumbai City - 400 020, India

Tel: (91) 22 6623 2600 Fax: (91) 22 6623 2604

👩 Saudi Arabia

In association with Anfaal Capital Villa 47, Tujjar Jeddah Prince Mohammed bin Abdulaziz Street P.O. Box 126575 Jeddah 21352

Tel: (966) 2 6068686 Fax: (966) 26068787

www.maybank-ke.com | www.maybank-keresearch.com