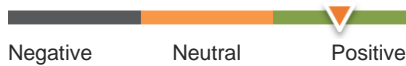


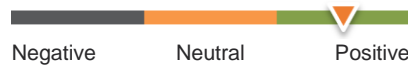
VIETNAM DAIRY PRODUCTS JSC (VNM) – INITIATION

Market Price VND122,500	Target Price VND155,600	Dividend Yield 3.7%	Rating ADD	Sector CONSUMER GOODS
-----------------------------------	-----------------------------------	-------------------------------	----------------------	---------------------------------

Outlook – Short term



Outlook – Long term



Valuation



17 September 2019

Nguyen Tien Duc

duc.nguyentien2@vndirect.com.vn

High quality at a bargain price

Domestic dairy consumption recovery to be key catalyst. After a decline of 2.7% yoy last year, local dairy market witnessed a positive 1H19 performance with +6.8% yoy in urban areas and +14.7% in rural areas, according to Kantar World Panel. We believe a surge in domestic demand was likely the result of marketing ramp-up of local dairy producers alongside with several new products launch in 1H19. We expect domestic consumption to grow at about 7% - 9% in the next 5 years.

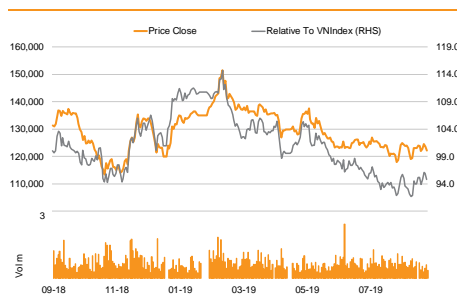
Innovation and diversified client targets to continue driving growth. VNM made 15 new product launches in 1H19, far above the number of 6 in 1H18. VNM also tap into teenagers and adults by releasing three new brands (MYJOY, HAPPY and POWER) which contain higher proportion of fresh milk, new variants and be well-designed for these clients groups.

Overseas business have bottomed out thanks to Cambodia and China markets. VNM's market share in Cambodia was about 10% as at end-2018 and expected to expand to 16% in 2019 thanks to low competition. Besides, we observed that VNM's export to China accelerated since the Protocol on dairy business between two countries was inked in Apr 2019. We expect VNM's overseas revenue will enjoy a FY19-21F CAGR of 15%, boosted by the promising China market.

We expect earnings to grow 3.6% yoy in FY19F on higher tax, but record double-digit growth in FY20-21F. Gross margin is forecasted to gain 0.4% pts per annum in the FY19-21F period on rising contribution from fresh milk and export business. As several factories' preferential tax period has ended, FY19F earnings is expected to increase at a modest growth of 3.6% due to higher corporate income tax (CIT).

Initiate coverage with ADD and TP of VND155,600. VNM is trading at TTM P/E of 20.8x, 19.8% lower than regional peer average and 18.1% below its 2-year historical average P/E. Given its TTM ROE of 35.0% vs 25.1% of regional average, we believe current valuation is compelling for a high-quality stock like VNM. Upside catalyst: higher-than-expected domestic dairy consumption growth. Downside risk: the rise of global raw milk prices.

Price performance



Source: VNDIRECT RESEARCH

Key statistics

52w high (VND)	151,600
52w low (VND)	113,378
3m Avg daily volume (shares)	686,150
3m Avg daily value (VNDm)	87,211
Market cap (VNDbn)	212,622
Outstanding shares (m)	1,750
Free float (%)	33.4
TTM P/E (x)	20.8
Current P/B (x)	7.5

Ownership

SCIC	36.0%
F&N Dairy Investment Pte, Ltd	20.0%
Platinum Victory Pte Ltd	10.6%
Others	33.4%

Source: VNDIRECT RESEARCH

Financial summary (VND)	12-17A	12-18A	12-19E	12-20E
Net revenue (bn)	51,041	52,562	56,853	62,096
Revenue growth	9.1%	3.0%	8.2%	9.2%
Gross margin	47.5%	46.8%	47.0%	47.5%
EBITDA margin	21.5%	19.9%	19.6%	19.8%
Net profit (bn)	10,296	10,301	10,668	11,778
Net profit growth	10.1%	0.0%	3.6%	10.4%
FD EPS	5,296	5,336	5,819	6,424
BVPS	13,561	15,084	16,709	18,971
ROAE	44.8%	41.4%	39.4%	38.4%

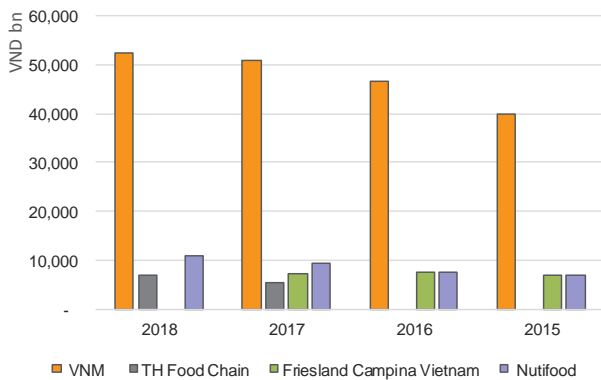
Source: VNDIRECT RESEARCH

A DOMINANT PLAYER WITH STRONG FOCUS IN PRODUCT INNOVATION

Solid footprint across all major segments

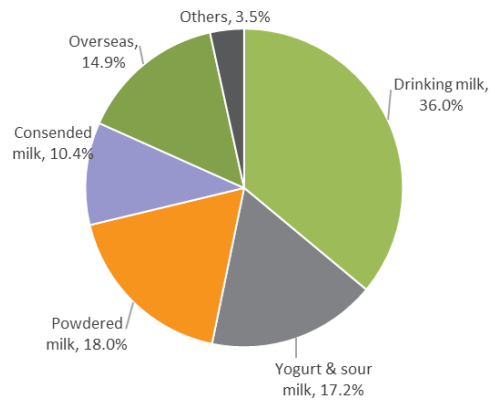
VNM enjoys a solid position in dairy business, driven by strong brand image, extensive distribution network and a top-notch management team. VNM has grown at a FY13-18 CAGR revenue of 11.2%, to be the dominant player (51.5% market share as at 2018) in Vietnam dairy market. According to Euromonitor, the company set the largest footprint in four main dairy product categories, including drinking milk (42% market share), yogurt & sour milk (69%), formula powdered milk (29%) and condensed milk (81%). In FY18, domestic dairy market contributed 85% of VNM's revenue. In term of revenue breakdown by category, drinking milk was estimated to be the largest contributor, accounting for 36% of FY18 revenue, followed by yogurt and powdered milk.

Figure 1: VNM's revenue outpaced other local peers



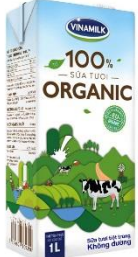





Source: VNM, VND RESEARCH

Figure 2: Drinking milk is the key revenue driver (as at FY18)



Source: VNM, VND RESEARCH

Figure 3: VNM has a wide product universe with over 250 SKUs covering all price segments

	UHT milk product group	Yogurt & sour milk product group	Baby food product group
Premium price segment	 Vinamilk 100% Organic fresh milk Launch year: 2016 Price: VND61/ml	 Vinamilk Greek yogurt Launch year: 2018 Price: VND85/g	 Organics Gold infant formula Launch year: 2019 Price: VND795/g
Mid-range price segment	 Vinamilk 100% from fresh milk Launch year: 2007	 Vinamilk fruit yogurt Launch year: 2010	 Optimum Gold Launch year: 2015

	Price: VND40/ml	Price: VND67/g	Price: VND419/g
Economy price segment			
	Vinamilk Fino from reconstituted milk Launch Year: before 2000 Price: VND28/ml	Vinamilk plain yogurt Launch year: before 2000 Price: VND55/g	Dielac Alpha and Dielac Alpha Gold IQ Launch year: 2005 Price: VND200-300/g

Source: VNM

Innovation is key factor to maintain the top position

Among peers, VNM has the largest production capacity (1.5m tonnes/year) and the largest distribution network (250,000 points of sale countrywide). However, we believe innovation is the key factor that helps the company to maintain its position and enjoy strong growth over the past decade. VNM’s innovation is presented in two aspects: 1) advanced manufacturing technology, and; 2) always renewed, always updated.

1) Leading in manufacturing technology to ensure product quality and winning consumers’ trust

VNM owns the most advanced, world-class dairy plant network across Vietnam, including 13 modern factories built with Tetra Pak’s latest technology (one of them stood among the only three Mega Dairy Plants in the world; all the 13 factories are certified with FSSC 22000 standard by Global Food Safety Initiative – GFSI, and five of them meet EU organics standard); and 13 dairy farm complexes (all certified with Global Gap standard and one meets EU organic standards). In recent years, VNM has been inviting children, parents and students (from primary and secondary schools) to visit its state-of-the-art factories and farms. We believe such activities have built strong trust among customers in VNM’s products and brands.

Figure 4: VNM’s mega factory is world’s most advanced dairy factory, which uses Tetra Pak’s technology. Around 90% of operation is handled automatically by robots



Source: VNDIRECT RESEARCH

Figure 5: VNM’s dairy farms are certified with Global G.A.P standard and EU organic standard



Source: VNDIRECT RESEARCH

2) Always renewed, always updated

Each VNM product is updated regularly in taste, style, packaging or ingredients in the last 40 years. As a result, VNM owns the most diversified product universe in Vietnam, with over 250 stock keeping units (SKUs) covering almost all kinds of dairy demand for all ages and gender groups. We believe VNM’s up to date product universe is an

unique competitive advantage because a customers can easily find a VNM's product to meet their demand without having to switch to other producers.

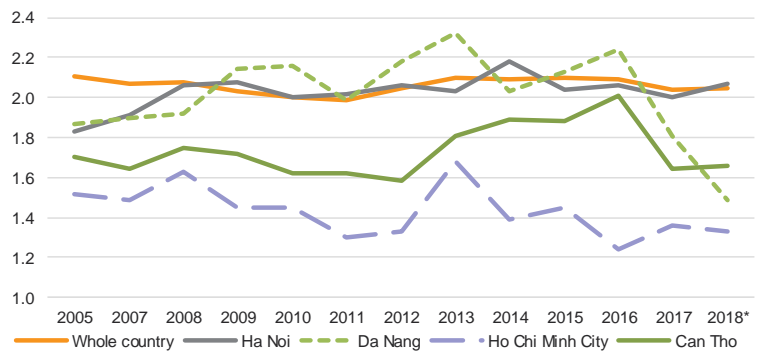
FY17-18 REVENUE GROWTH HIT BY SECTOR HEADWINDS

Domestic volume decelerated to single-digit growth

VNM's domestic sale volume experienced strong CAGR of 12.8% during FY13-16 on the back of double-digit demand growth. However the pace slowed to 8.4% of CARG FY17-18, after peaking at 18.5% in FY16. According to Kantar World Panel, dairy consumption volume in Vietnam's urban areas (4 cities of Hanoi, Ho Chi Minh, Da Nang and Can Tho) decelerated since 4QFY16. In such context, VNM's domestic sales growth slowed down to 2.7% yoy in 2018 despite the fact that its market share expanded by 1% every years during 2017-2018.

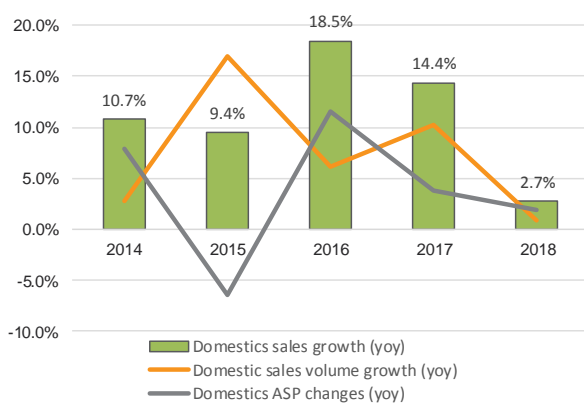
The deceleration of Vietnam dairy growth was blamed for high-base growth in past few years, lower birth rate and the emergence of new beverages, such as plant-based milk or milk tea. Though dairy sales in cities did not grow or even kept at negative growth, we saw that rural still enjoyed strong double-digit growth.

Figure 6: Lower birth rate might have reduced sales growth of dairy products in urban area in 2018



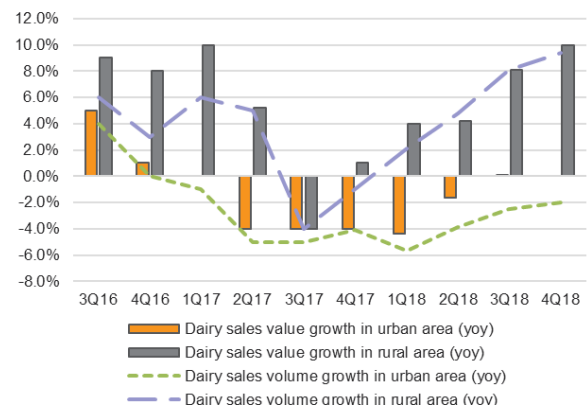
Source: GSO

Figure 7: VNM's domestic sales volume growth slowed down since 2017



Source: VNM, VND RESEARCH

Figure 8: Vietnam dairy consumption lost its positive momentum since 4Q16



Source: VNM, Kantar World Panel

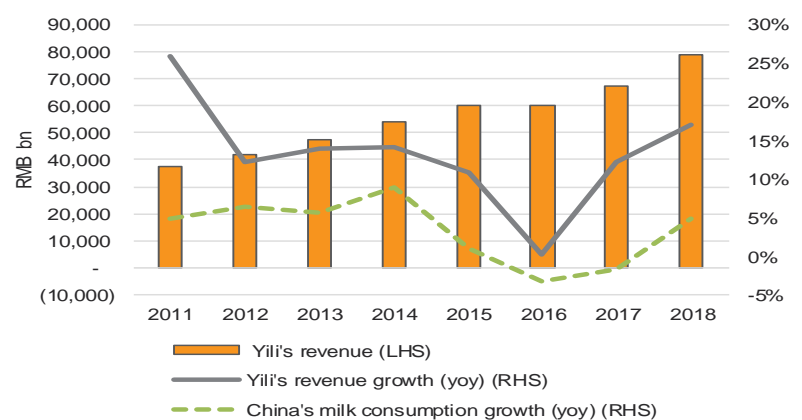
We observed that the VNM's development growth was similar to the case study of Inner Mongolia Yili Dairy Company (Yili). Yili is China's biggest dairy producer with a market share of 29% by end-2018. The company's sales growth slowed down in 2015-2016 due to weak consumption in mainland China. According to Leading IR.com, the

slowing dairy consumption growth in the world's most populous country was caused by "close to saturation" situation of tier-1 and tier-2 cities, where dairy consumption per capita reached 48kg/person.

However, Yili managed to make a recovery in FY17 revenue, posting an annual growth of 12.2% before accelerating to 17.0% in FY18 as it carried out various solutions, including launching new products, upgrading product quality as well as expanding retail network in low tier cities and rural areas.

China dairy market revitalized in 2018 thanks to more new product introduced and rising birth rate. As China and Vietnam show many common patterns in dairy consuming behaviour (similar culinary culture), we expect Vietnam's dairy market to follow China's path, and VNM's revenue will recover from FY19F.

Figure 9: Yili's revenue growth decelerated during FY15-16 but bounced back since 2017



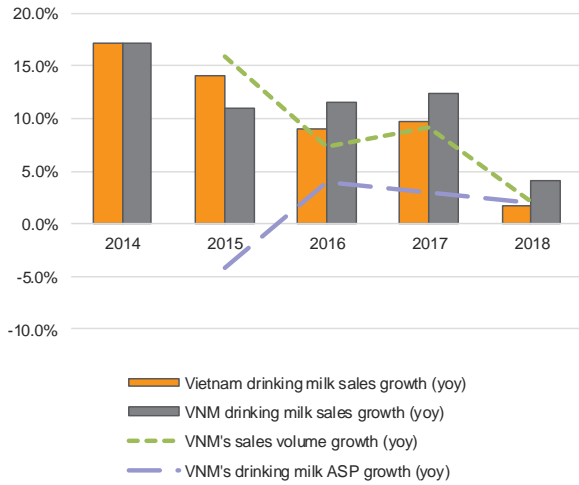
Source: Bloomberg

Drinking milk: strong leadership position

Drinking milk is the largest revenue contributor to the Vinamilk (37% as at FY18) and also the largest segment in Vietnam dairy business. Vietnam's drinking milk sales value (including animal-based and plant-based) grew at 1.8% yoy in FY18, much lower than the level of -2.7% seen in FY17 due to weaker demand in urban areas.

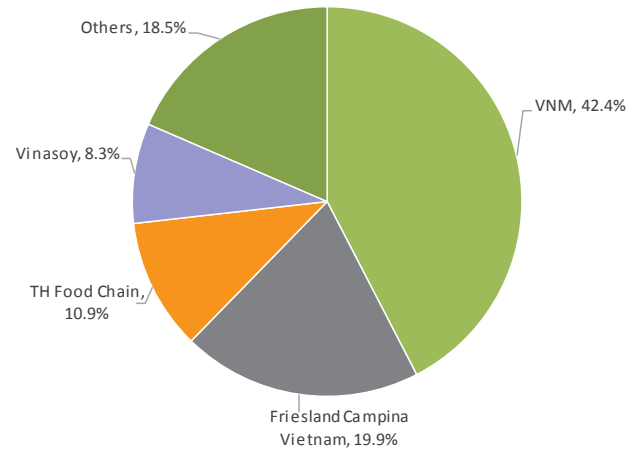
VNM's drinking milk sale volume grew at 3.2% yoy in FY18, well above the market thanks to 1) an effective marketing program which helped boost sales volume by 2.1% yoy, and 2) a higher fresh milk output which helped raise ASP by 2.0% yoy. The company reported a jump of 25% yoy in fresh milk production following higher milk yield and increased cow head. VNM released two new cow milk products in this category in 2018, including Vinamilk 100% A2 (fresh milk) and ADM GOLD Banana (reconstituted milk), but we believe they didn't contribute much to the category's sales due to low demand. VNM's market share in the drinking milk segment reached an estimated 42.4% (+0.9% pts yoy). TH Food Chain was VNM's main competitor in urban areas and Friesland Campina Vietnam the rival in rural areas.

Figure 10: VNM's drinking milk revenue grew faster than the market in 2018, driven by sales volume growth



Source: Euromonitor, VND RESEARCH

Figure 11: VNM's market share in drinking milk segment increased 0.9% pts in 2018 to 42.4%



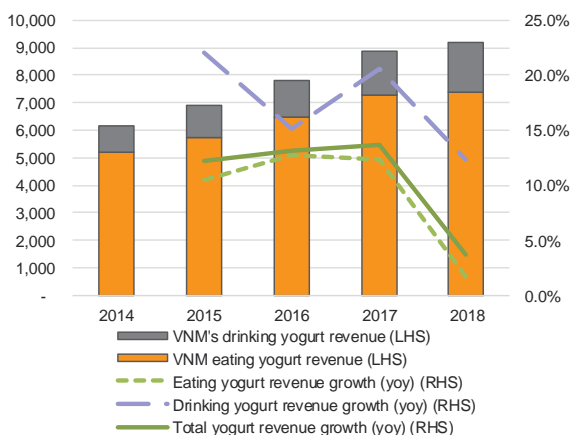
Source: Euromonitor, VND RESEARCH

Yogurt: eating yogurt faced tough time in FY18 while drinking yogurt enjoyed 2-digit growth

In order to raise the ASP of yogurt segment, VNM launched three variants of eating yogurt in 2018, namely Greek Yogurt, Black Rice Yogurt and Pineapple Yogurt with price premium +17% to +54% compared with its main product. While Black Rice Yogurt was well received by consumers, we believe VNM's eating yogurt market share in FY18 fell slight by 0.5% pts yoy to 85% because of a fierce competition from TH True Yogurt brand. Consequently, the eating yogurt revenue rose an estimated 1.7% yoy only in FY18, below the estimated 3% yoy growth of the category.

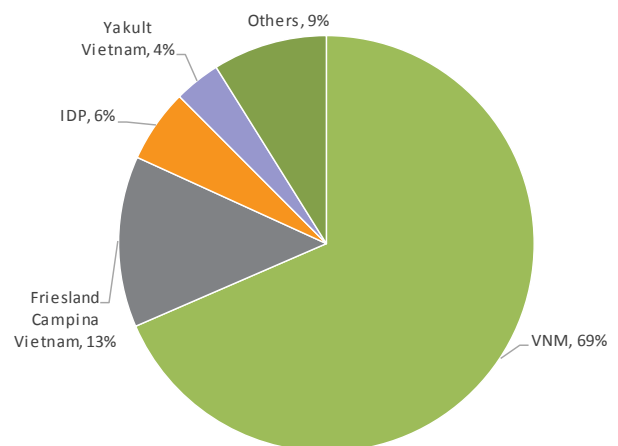
On the other hand, while drinking yogurt sales growth slowed, its growth rate remained strong at +12% yoy (-8.3% pts) thanked to higher demand for probiotic products under Probi brand. VNM's Probi drinking yogurt was highly rated by consumers (mostly children and women) given its light, fresh sour taste and benefit on health. VNM's drinking yogurt market share in FY18 edged up 1.8% pts yoy to 37.7% as a result.

Figure 12: VNM's yogurt revenue grew 3.8% yoy in 2018, mainly driven by drinking yogurt



Source: Euromonitor, VND RESEARCH

Figure 13: VNM held 69% of yogurt market share in 2018 with three main brands Vinamilk, Susu and Probi



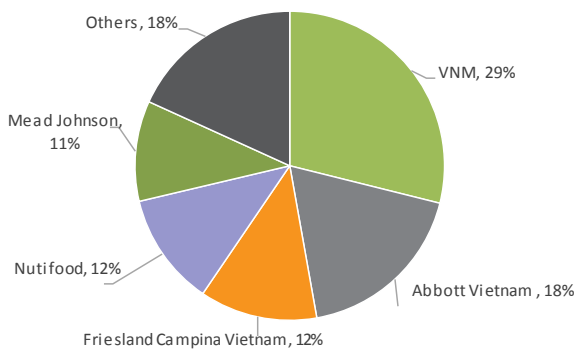
Source: Euromonitor, VND RESEARCH

Powder milk: grew 3.9% yoy in FY18 revenue, mainly driven by infant cereal products

Formula powder milk is the main product group under this category, which account for over 75% of its revenue. We believe formula powder milk revenue edging up only 1.3% yoy (-7.3% pts) to VND7,251bn in FY18 was due to saturation, lower birth rate and increasing competition. Note that infant formula powder milk has been growing slower than other categories for years as Vietnamese moms are encouraged to breastfeed their babies. In 2018, VNM only added one new variant – the Optimum Mama Gold for pregnant and breast-feeding women, with new orange flavour. We believe the release yielded no good result as moms mostly stick to the original vanilla flavour.

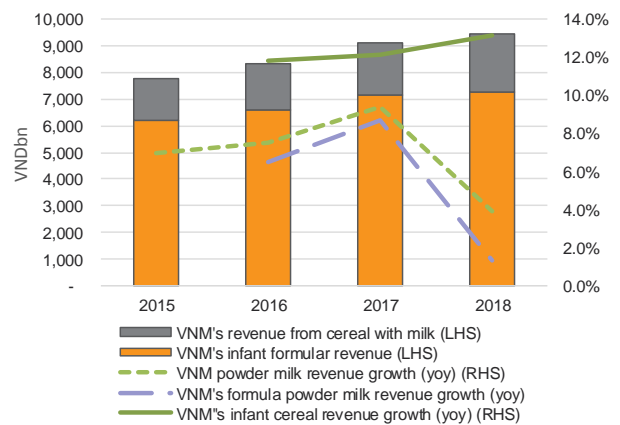
VNM's Ridielac infant cereal revenue, on the other hand, was estimated to further accelerate to 13.1% yoy (+1.0% pts) in FY18 thanks to new product launches, new packaging size and customer preference as more moms choose the cereal for their six-to-nine month babies instead of cooking at home. Moms prefer VNM's cereal to other producers' thanks to its reasonable price, trusted quality and the nationwide distribution network. VNM added four new variants to this group in 2018, which were highly welcome by moms.

Figure 14: VNM continued to be No.1 in powder milk category in 2018, but closely followed by other producers



Source: Euromonitor, VND RESEARCH

Figure 15: Infant cereal was the main driver for VNM's powder milk revenue growth in 2018

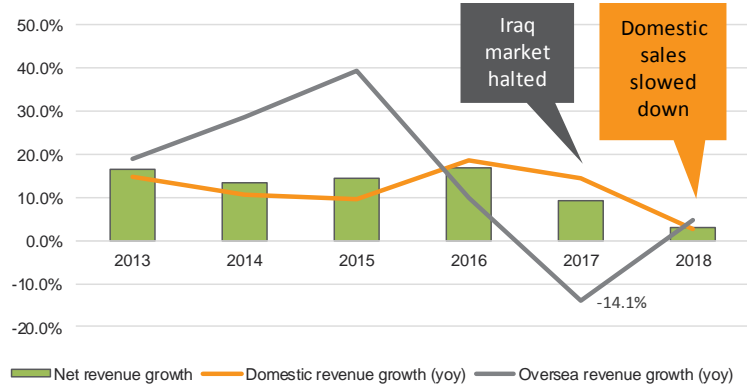


Source: Euromonitor, VND RESEARCH

Halted Middle East market also impeded FY17-18 revenue growth

In FY17 the company had to suspend exports to the Middle East market due to political instability in Iraq. The disruption hence prompted overseas revenue to plunge 14.1% yoy that year. In 2018, VNM's overseas revenue slightly rebounded 4.6% yoy thanks to new markets in Africa and Cambodia.

Figure 16: Iraq market halt dragged FY17 revenue growth to even deeper.



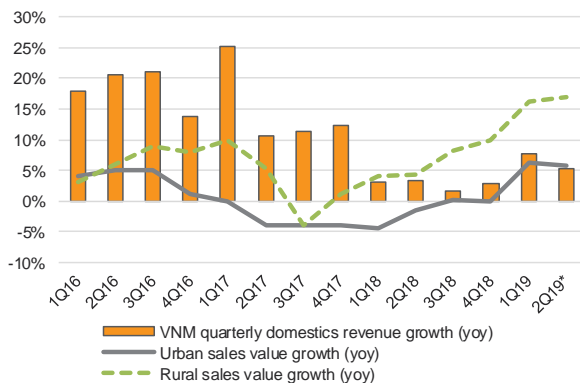
Source: VND RESEARCH

WE EXPECT EARNINGS TO REBOUND IN FY19-21F ON THE BACK OF DOMESTIC CONSUMPTION RECOVERY

Positive performance in 1H19 signal a recovery on domestic dairy business

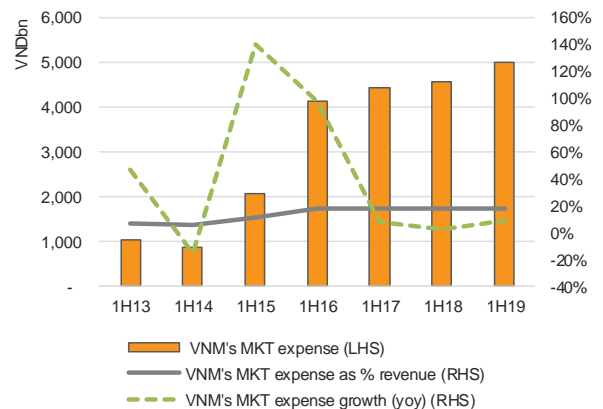
We estimate Vietnam’s dairy consumption to grow 7% yoy in 2019, after a decline of 2.7% yoy last year. Local dairy market witnessed a better-than-expected 1H19 performance with +6.8% yoy in urban areas and +14.7% in rural areas, according to Kantar World Panel. We believe a surge in domestic demand was likely the result of marketing ramp up of local dairy producers alongside with new products launch in 1H19. VNM’s marketing costs jumped 9.4% yoy in 1H19 (+6.9% pts) as the firm raised the percentage of marketing expense/revenue by 0.3% pts to 18.0%. Vinasoy, Vietnam’s No.1 soymilk producer with an estimated 76% market share in 2018, also boosted its marketing expenses by 20.4% yoy in 1H19 and renewed all TV ads. While we don’t have marketing data of others dairy producers in 1H19, the TV commercial frequency of TH Food Chain product alone was higher than in 2018 per our observation.

Figure 17: VNM’s domestics sales growth in 1H19 on the back of dairy consumption recovery and new product launches



Source: VNM, Kantar World Panel

Figure 18: VNM increased marketing expense in 1H19 to support sales.



Source: VNM

VNM launched 15 new product launches in 1H19, far above the number of 6 in 1H18. It also expanded the customer target from a traditional group (children aged below eight, families with children and elderly customers) to include teenagers and adult customers by releasing three new brands for these age groups (including MYJOY drinking milk, HAPPY milk tea for teenagers and POWER milk drink,

Zori rice milk for adults) and adding more variants to yogurt category for adult customers. Note that spending on dairy products by a mature family rose 11.1% yoy in FY18, while the spending of all families on dairy products fell 2.7% yoy in the same year, according to Kantar World Panel. We also see that VNM has trimmed the sugar volume in its products to meet adult customers' preference.

Figure 19: VNM released more new products in 1H19 than in 1H18, targeting teenagers and adult customers

2019 new product launches	Product category	Target customers	Retail price (VND/g)	Price premium
1 Organic Gold	Powder milk	Infant 0-6 years old	794	180%
2 Optimum infant cereal	Powder milk	Infant 1/2 - 4 years old	425	66%
3 Organic Infant cereal	Powder milk	Infant 1/2 - 4 years old	600	135%
4 Ridielac salmon & beef infant cereal	Powder milk	Infant 1/2 - 4 years old	284	11%
5 MY JOIN milk drink	Drinking milk	Teenage	37	4%
6 Power milk drink	Drinking milk	Adult/sport	34	-5%
7 Walnut eating yogurt	Yogurt	women	85	54%
8 Pinapple Probi drinking yogurt	Yogurt	Children/Women	67	0%
9 India cream cobra melon Probi drinking yogurt	Yogurt	Children/Women	67	1%
10 Less sugar plain Probi drinking yogurt	Yogurt	Children/Women	67	1%
11 Happy Milk Tea	Drinking milk	Teenage	41	13%
12 Zori rice milk	Other	women	44	79%
13 COCO coconut water	Other	All	33	33%
14 Almon soymilk	Other	Women	34	39%
15 Red bean soymilk	Other	Women	34	39%

Source: VNM

We believe those adjustments to VNM's product strategy in the back of dairy consumption recovery will boost sales volume. As a result, VNM's 1H19 domestic revenue increased 6.4% yoy (+3.2% pts).

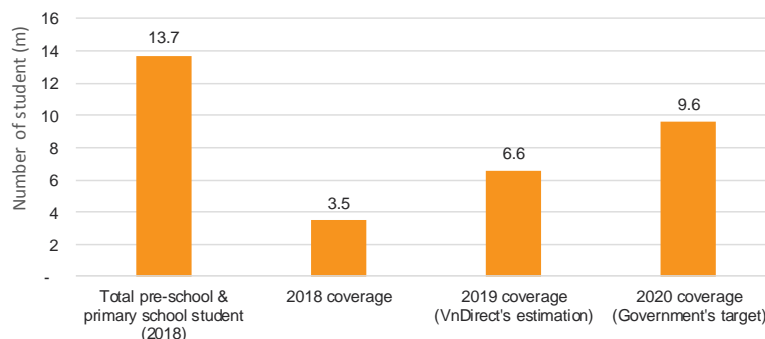
Drinking milk sales volume is forecasted to rise 4.7% yoy in FY19 thanks to a recovery of dairy consumption and new product launches (two new products MYJOY and POWER are expected to account for 1.5% of the volume increase). Drinking milk ASP will rise 2.9% yoy in FY19F (+1.8% pts), following a higher percentage of fresh milk in the product mix (+4.6% pts to 32.3%). Consequently, drinking milk revenue in FY19 is forecast to accelerate by 4.5% pts to 7.7% yoy. This product category will contribute 36.5% to FY19F net revenue and will account for 33.9% of the annual growth. We expect revenue growth of this category to accelerate to a CAGR of 10.4% in FY19-21F.

We expect industry volume growth to moderate at CAGR 7%-9% in the next 5 years

We believe National school milk program (NSMP) will improve sales by increasing dairy consumption per capita in long term. NSMPs have been launched by governments all around the world with aim to improve children's health and physique. However, it is also reported to help boosting milk consumption per capita thanks to creating a habit of having milk and dairy products at early age. For example, NSMP helped dairy consumption per capita in China to increase from 6.7kg in 2000 to 27.9kg in 2014. In Japan, data showed that dairy consumption per capital to rise from 5kg in 1960's to 70kg by 2005 (according to FAO). Vietnamese government kicked off NSMP in 2016, however actually stimulated Vietnam dairy market since 4Q18 when Hanoi and Ho Chi Minh City officially launched the program. Currently, the program has provided drinking milk to about 3.5 million children in 11 provinces, from its coverage of 1 million children in 8 provinces in 2017. We expect the program will meet the government's target to reach all 63 province by 2021 with 9.6 million/13.7 million of pre-school and primary school children will be served each day. After that, we

expect the program to expand to secondary school similar to China and Japan case study. We expect NSMP to improve dairy consumption volume by 1-2% each year in the next 5 years.

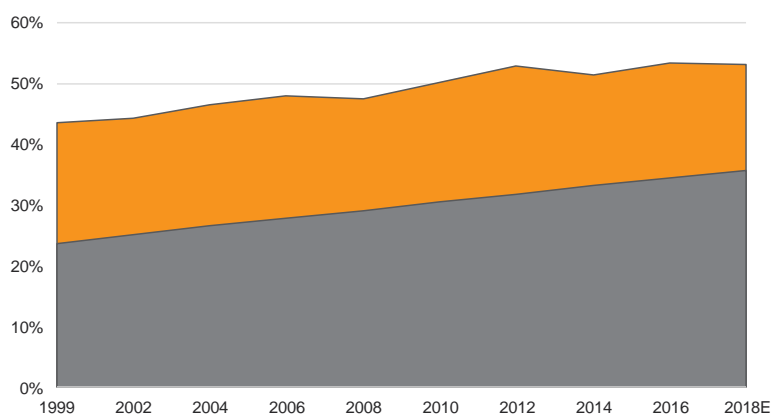
Figure 20: National School Milk Program will add more demand in 2019-2020



Source: Ministry of Education, Vietnam Government, VND RESEARCH

We see that gap among living standard of rural area and urban area in Vietnam has been narrower in the last 20 years thanks to lower gap between average personal income and ring urbanization rate. With the fact that dairy consumption per capita in rural area is much lower than urban area, we believe dairy sales in rural area be able to maintain quick growth of 10-12% each year in the next 5 years. In the other hand, dairy consumption volume in urban areas is expected to growth at 5-6% in the same period.

Figure 21: Gap among living standard of rural area and urban area is expected to be narrowed down



Source: GSO

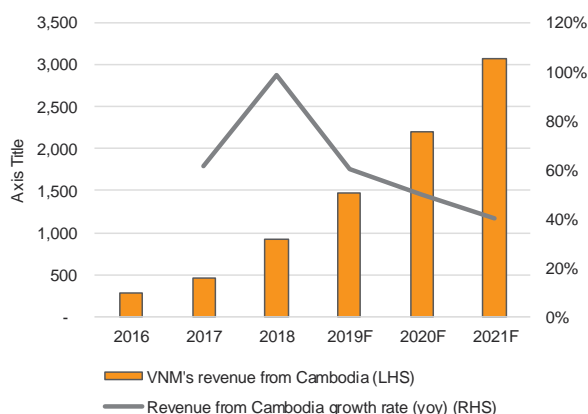
In overall, we expect domestic sales volume to rise 5.0% yoy (+4.2% pts) and blended domestic ASP to increase 2.0% yoy (+0.1% pts) in FY19F thanks to changes in product mix. In FY19-21F, VNM's domestic revenue is expected to post a CAGR of 8.2%.

Overseas revenue have bottomed out thanks to Cambodia and China markets

VNM owns the largest dairy plant in Cambodia, which was built in 2016, and revenue from Cambodia has been doubling each year since then. VNM's market share in Cambodia was about 10% as at end-2018 and expected to expand to 16% 2019 thanks to low competition. As a result, revenue from Cambodia will surge 60% yoy to VND1.5tr and the growth will account for 1.0% of VNM's net revenue growth in FY19F.

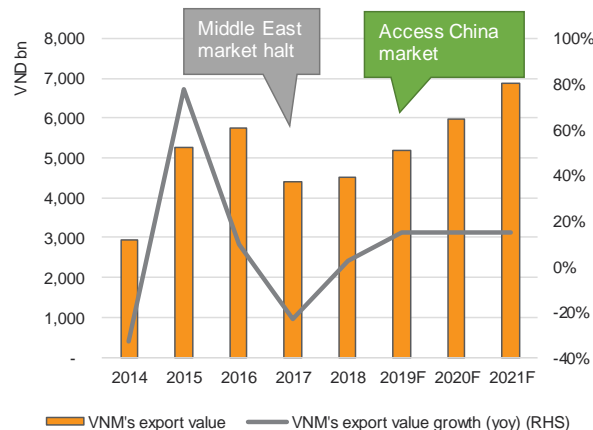
VNM's export value has begun to accelerate after China had approved the import of Vietnamese dairy products from 2019. VNM has been preparing for this opportunity for years by improving all its farms and factories to meet Global Gap and EU Organic standards, because China is a promise, and also a highly demanding market, with many technical barriers. China is the world's top dairy importer in 2018, with a value of US\$3.4bn (12.3% of the total world import). We estimate VNM's export value to grow 15.0% yoy in FY19F, which aligned with its 1Q19 actual growth, and will account for 14.8% of VNM's revenue growth for the whole year. In FY19-21F, VNM's overseas revenue is expected to enjoy a growth of 15% a year.

Figure 22: VNM's revenue in Cambodia is expected to grow rapidly in FY19-21F



Source: VNM, VND RESEARCH

Figure 23: VNM's export value is expected to accelerate thanks to China's market



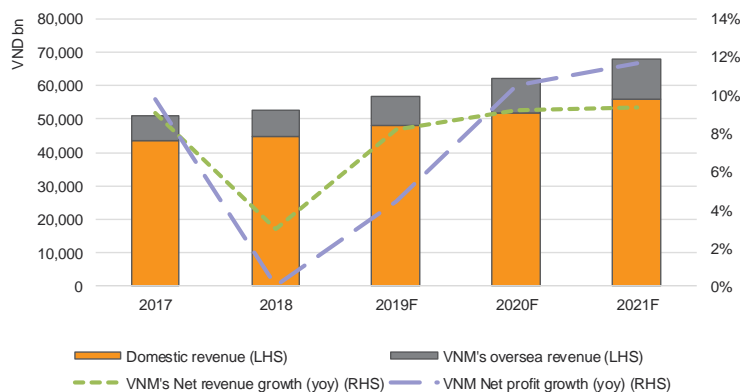
Source: VNM, VND RESEARCH

Earnings is expected to accelerate at 11.1% during FY19-21F

We forecast VNM's net revenue to grow 8.2% yoy in FY19F, mainly driven by stronger sales of the domestic market. Gross margin and EBIT margin are expected to increase slightly by 0.1%pts this year while net margin is estimated to be cut by 0.8% pts to 18.7% due to higher taxing. We believe the end of the preferential tax period for Binh Duong milk factory meant blended CIT to increase 0.9% pts to 16.3% in 2019. Consequently, FY19F net profit is expected to grow 3.6% yoy to VND10.7tr.

We expect VNM's net revenue will achieve a CAGR of 9.7% in FY19-21F thanks to a recovery of the domestic dairy market, new product launches, higher ASP and positive results from overseas markets.

Figure 24: VNM's revenue and net profit growth will accelerate in FY19-21F



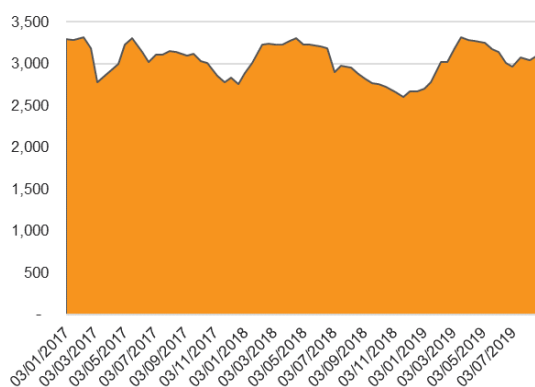
Source: VNM, VND RESEARCH

Gross margin will improve slightly in FY2019-21F

Milk price is expected to increase by 7% yoy in 2019. In 9M19, average global has risen by 9% yoy due to lower supply from Europe. However, we expect 2019 average annual global price to increase by only 7% yoy due to the fact that milk price usually decrease in 4Q. In 2020-21, we expect global milk price to increase by averagely 3% each year.

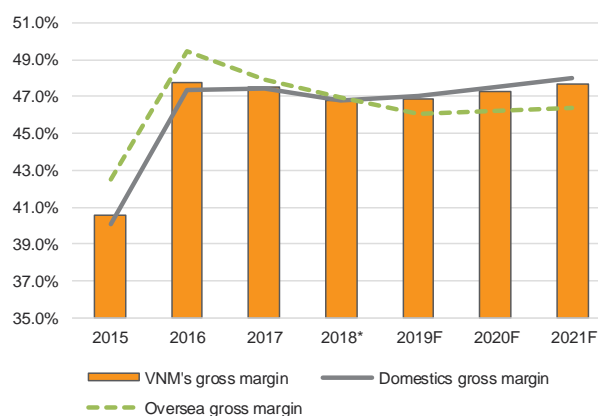
Despite the fact that global milk price trend will produce negative impact on gross margin, we believe VNM's overall gross margin will improve 0.4% pts each year until FY21F thanks to better gross margin of new products, rising export revenue and improved gross margin of overseas subsidiaries. Net margin in the period is expected to be improved by 0.2% pts each year, to reach 19.2% in FY21F, prompting the net profit to accelerate to a CAGR of 11.7% in FY19-21F.

Figure 25: Global whole milk powder price (26% fat) is expected to increase by 6% yoy in 2019



Source: globaldairytrade

Figure 26: VNM's gross margin is expected to improve in FY2019-21F despite rising milk price.



Source: VND RESEARCH

VNM is not likely to be able to increase its ownership on GTN to 100%. GTN Foods (HOSE GTN) is the owner of MOC CHAU MILK brand, which hold about 0.6% domestic dairy market share in 2018. In 2019, VNM announced its plan to buy 49% of GTN and successfully bought 41% of GTN's share. We believe VNM target's is rising ownership in GTN to 100% in order to take fully control of GTN's landbank to develop high quality milk farms. However, we think that it is very hard for VNM to rise ownership on GTN to over 41% due to objection of GTN's BOM. Hence, we take the assumption that VNM's ownership in GTN is 41% in our forecast model.

Figure 27: VNDirect Research's forecasts of Vinamilk's FY2019-21F business results

VNDbn	2018	2019F	2020F	2021F
Net revenue	52.562	57.093	62.588	68.717
% yoy	3,0%	8,6%	9,6%	9,8%
<i>Drinking milk</i>	3,2%	7,7%	10,4%	10,5%
<i>Yogurt & sour milk</i>	2,0%	8,5%	8,5%	8,5%
<i>Powder milk</i>	3,9%	6,0%	6,0%	6,0%
<i>Condensed milk</i>	0,6%	5,0%	5,0%	5,0%
<i>Other</i>	0,9%	3,0%	3,0%	3,0%
<i>Oversea subsidiary</i>	4,6%	18,1%	17,3%	17,3%
Gross profit	24.611	26.748	29.590	32.780
Gross margin	46,8%	46,9%	47,3%	47,7%
SG&A	(13.399)	(14.736)	(16.226)	(17.869)
SG&A as % revenue	-25,5%	-25,8%	-25,9%	-26,0%
EBIT	11.212	12.012	13.364	14.911
EBIT margin	21,3%	21,0%	21,4%	21,7%
%yoy	-1,9%	7,1%	11,3%	11,6%
Net profit	10.301	10.668	11.778	13.160
Net margin	19,6%	18,7%	18,8%	19,2%
%yoy	0,0%	3,6%	10,4%	11,7%

SOURCE: VNDIRECT RESEARCH

VALUATION

We initiate coverage with ADD and target price of VND155,600. We like solid position in dairy business, driven by strong brand image, extensive distribution network and a top-notch management team. Our 12-month target price is based on an equal weighting of DCF approach (WACC 9.9%, LTG 5%) and 25.9x FY20F P/E.

Figure 28: Valuation summary

Methodology	Price	Weight	Weighted price
FCFF	144,748	50%	72,374
P/E	166,635	50%	83,317
Target price			155,691

Source: VND RESEARCH

Multiple valuation method: We value VNM by applying peer's average P/E of 25.9x on forecast 2020 FD EPS, which is VND6,425.

Figure 29: Valuation: Multiples (P/E)

2020F NPAT attribute to common share holder (VNDbn)	11,189
2020F No. of outstanding share (m)	1,741
2020F EPS (VND)	6,425
Target P/E (x)	25.9
Implied price	166,635

Source: VND RESEARCH

Discounted cash flow (FCFF): We use 10-year DCF to derive VNM's intrinsic value of VND144,748/share, applying WACC of 9.9% and a long-term growth rate of 5.0%.

Figure 30: Discounted Cash Flows - Future Cash Flows to Firm (FCFF)

Present value of Future Cash Flows to Firm (VNDbn)	80,345
Present value of Terminal value (VNDbn)	165,711
Enterprise Value (VNDbn)	246,056
Net debt (VNDbn)	6,012
Equity Value	252,068
No. of Outstanding Share (million)	1,741
Equity value per share (VND)	144,748
<hr/>	
WACC	9.9%
Cost of Equity	10.9%
Long-term growth	5.0%

Source: VND RESEARCH

Figure 31: Discounted Cash Flow

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	1	2	3	4	5	6	7	8	9	10
EBIT	12,012	13,364	14,911	16,272	17,806	19,628	21,554	23,168	24,987	27,040
Add: Depreciation	1,713	1,911	2,118	2,323	2,523	2,740	2,978	3,238	3,521	3,827
Less: Capital expenditure	(3,196)	(3,504)	(3,847)	(3,506)	(3,835)	(4,209)	(4,611)	(5,001)	(5,433)	(5,913)
Changes in Working Capital	(1,905)	(527)	(39)	(170)	342	(200)	85	(191)	548	(227)
Free Cash Flow (FCF)	8,623	11,244	13,143	14,919	16,837	17,959	20,006	21,214	23,622	24,727
Less: Taxes Paid	(2,084)	(2,301)	(2,571)	(2,595)	(2,850)	(3,149)	(3,436)	(3,449)	(3,722)	(4,029)
Free Cash Flows to Firm	6,539	8,943	10,572	12,324	13,987	14,810	16,570	17,765	19,900	20,699
Terminal Value										426,089
PV of FCFF	5,950	7,403	7,963	8,447	8,722	8,404	8,555	8,345	8,506	8,050
PV of Terminal Value										158,760

Source: VND RESEARCH

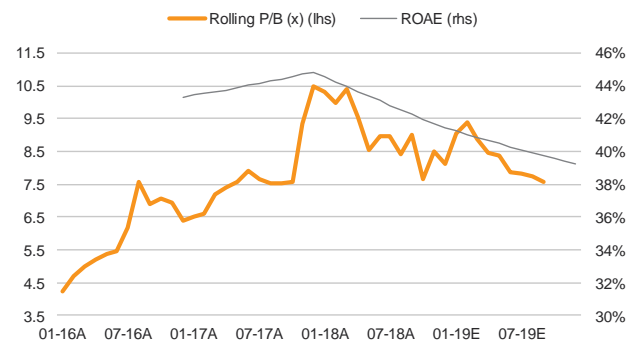
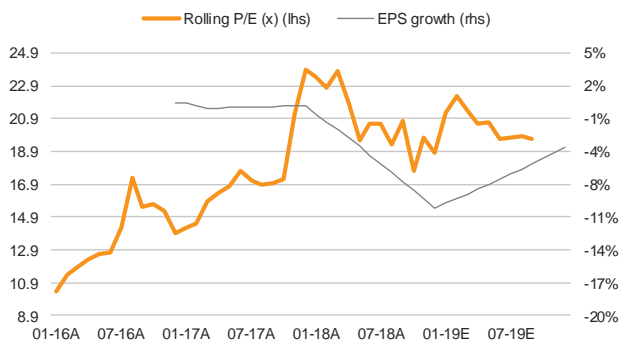
Figure 32: Peer comparison

Peers	Bloomberg Code	Market cap (US\$ m)	TTM NPAT growth (%)	TTM EPS growth (%)	TTM ROA (%)	TTM ROE (%)	Current D/E (x)	TTM P/E (x)	TTM P/B (x)
Danone SA	BN FP	48,256	-4.1%	-6.9%	5.3%	15.3%	1.1x	23.9x	3.2x
Inner Mongolia Yily	600887 CH	25,515	11.4%	11.4%	13.9%	27.1%	0.0x	26.8x	7.0x
Mengniu China	2319 HK	15,316	43.4%	32.6%	5.2%	14.2%	0.4x	30.4x	4.1x
Meiji Holdings	2269 JP	10,967	-3.4%	-15.2%	6.1%	11.6%	0.3x	19.0x	9.2x
A2 Milk Co	A2M AU	6,813	47.0%	37.7%	33.7%	42.8%	0.0x	36.7x	13.4x
Calbee INC	2229 JP	4,123	1.1%	0.7%	10.2%	13.5%	0.1x	22.9x	3.0x
Morinaga Milk	2264 JT	1,977	18.1%	8.2%	3.3%	8.7%	0.6x	14.8x	1.3x
Bright Dairy Co	600597 CH	1,927	-36.9%	10.8%	2.2%	6.8%	0.7x	36.5x	9.6x
Megmilk Snow Brand	2270 JT	1,652	-16.2%	13.4%	3.1%	7.0%	0.4x	15.3x	1.0x
Dutch Lady Milk	DLM MK	922	-2.4%	-44.0%	29.2%	103.6%	0.1x	33.2x	30.8x
Average		11,747	5.8%	4.9%	11.2%	25.1%	0.4x	25.9x	8.3x
Vietnam Dairy Product	VNM VN	9,192	7.6%	7.6%	27.6%	35.0%	0.1x	20.8x	7.5x

Source: FIINPRO, BLOOMBERG

Potential re-rating catalysts are: VNM's product consumption in China is stronger than expected; VNM gains access to new overseas markets and the company reveals new products or milk farm projects. **Downside risks include** lower-than-expected raw milk production, higher-than-expected global whole/skim milk powder prices and more intense pricing competition.

Valuation



Income statement

(VNDbn)	12-18A	12-19E	12-20E
Net revenue	52,562	56,853	62,096
Cost of sales	(27,951)	(30,112)	(32,629)
Gen & admin expenses	(1,133)	(1,226)	(1,339)
Selling expenses	(12,266)	(13,452)	(14,753)
Operating profit	11,212	12,064	13,375
Operating EBITDA	9,586	10,349	11,459
Depreciation and amortisation	1,627	1,715	1,916
Operating EBIT	11,212	12,064	13,375
Interest income	666	671	671
Financial expense	(118)	(130)	(177)
Net other income	269	190	207
Income from associates & JVs	22	30	34
Pre-tax profit	12,052	12,825	14,111
Tax expense	(1,846)	(2,093)	(2,312)
Minority interest	(22)	(23)	(25)
Net profit	10,184	10,710	11,773
Adj. net profit to ordinary	10,184	10,710	11,773
Ordinary dividends	(7,838)	(7,838)	(7,838)
Retained earnings	2,346	2,873	3,936

Balance sheet

(VNDbn)	12-18A	12-19E	12-20E
Cash and equivalents	1,523	1,706	1,997
Short term investments	8,674	7,675	8,383
Accounts receivables	4,621	4,999	5,460
Inventories	5,526	6,575	7,035
Other current assets	304	1,474	2,677
Total current assets	20,648	22,429	25,553
Fixed assets	14,234	15,248	16,280
Total investments	1,069	2,812	2,612
Other long-term assets	1,416	1,414	1,427
Total assets	37,366	41,903	45,872
Short-term debt	1,060	1,583	1,689
Accounts payable	3,991	4,317	4,715
Other current liabilities	5,588	4,821	4,835
Total current liabilities	10,640	10,721	11,239
Total long-term debt	216	1,779	1,209
Other liabilities	239	259	283
Share capital	17,417	17,417	17,417
Retained earnings reserve	7,155	9,492	12,897
Shareholders' equity	25,781	28,654	32,650
Minority interest	490	490	490
Total liabilities & equity	37,366	41,903	45,872

Cash flow statement

(VNDbn)	12-18A	12-19E	12-20E
Pretax profit	12,052	12,825	14,111
Depreciation & amortisation	1,684	1,772	1,973
Tax paid	(1,880)	(2,093)	(2,312)
Other adjustments	(675)	(704)	(679)
Change in working capital	(3,040)	(1,869)	(448)
Cash flow from operations	8,140	9,932	12,645
Capex	(3,186)	(3,275)	(3,528)
Proceeds from assets sales	94	87	62
Others	1,398	(745)	(508)
Other non-current assets changes	648	(64)	(79)
Cash flow from investing activities	(1,045)	(3,997)	(4,052)
New share issuance	0	0	0
Shares buyback	(3)	0	0
Net borrowings	724	2,087	(464)
Other financing cash flow	(1)	0	0
Dividends paid	(7,256)	(7,838)	(7,838)
Cash flow from financing activities	(6,536)	(5,751)	(8,302)
Cash and equivalents at beginning of period	963	1,523	1,706
Total cash generated	559	184	291
Cash and equivalents at the end of period	1,523	1,706	1,997

Key ratios

	12-18A	12-19E	12-20E
Dupont			
Net profit margin	19.4%	18.8%	19.0%
Asset turnover	1.46	1.43	1.41
ROAA	28.3%	27.0%	26.8%
Avg assets/avg equity	1.47	1.46	1.43
ROAE	41.4%	39.4%	38.4%
Efficiency			
Days account receivable	23.5	23.5	23.5
Days inventory	72.2	79.7	78.9
Days creditor	52.1	52.3	52.9
Fixed asset turnover	3.93	3.86	3.94
ROIC	37.0%	32.9%	32.7%
Liquidity			
Current ratio	1.94	2.09	2.27
Quick ratio	1.42	1.48	1.65
Cash ratio	0.96	0.88	0.92
Cash cycle	43.5	50.8	49.6
Growth rate (yoy)			
Revenue growth	3.0%	8.2%	9.2%
Operating profit growth	(1.9%)	7.6%	10.9%
Net profit growth	0.0%	3.6%	10.4%
EPS growth	0.0%	3.6%	10.4%
Share value			
Basic EPS (VND)	5,336	5,819	6,424

Source: VNDIRECT RESEARCH

DISCLAIMER

The content of this report (including the views and opinions expressed therein, and the information comprised therein) has been prepared by and belongs to VNDIRECT Securities Corporation, and is distributed by CGS-CIMB or CIMB Investment Bank Berhad ("CIMB"), as the case may be, pursuant to an arrangement between VNDIRECT Securities Corporation and CGS-CIMB. VNDIRECT Securities Corporation is not an affiliate of CGS-CIMB or CIMB.

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.

By accepting this report, the recipient hereof represents and warrants that he is entitled to receive such report in accordance with the restrictions set forth below and agrees to be bound by the limitations contained herein (including the "Restrictions on Distributions" set out below). Any failure to comply with these limitations may constitute a violation of law. This publication is being supplied to you strictly on the basis that it will remain confidential. No part of this report may be (i) copied, photocopied, duplicated, stored or reproduced in any form by any means or (ii) redistributed or passed on, directly or indirectly, to any other person in whole or in part, for any purpose without the prior written consent of CGS-CIMB or CIMB, as the case may be.

The information contained in this research report is prepared from data believed to be correct and reliable at the time of issue of this report. VNDIRECT Securities Corporation may or may not issue regular reports on the subject matter of this report at any frequency and may cease to do so or change the periodicity of reports at any time. None of VNDIRECT Securities Corporation, CGS-CIMB or CIMB is under any obligation to update this report in the event of a material change to the information contained in this report. None of VNDIRECT Securities Corporation, CGS-CIMB or CIMB has any and will accept any, obligation to (i) check or ensure that the contents of this report remain current, reliable or relevant, (ii) ensure that the content of this report constitutes all the information a prospective investor may require, (iii) ensure the adequacy, accuracy, completeness, reliability or fairness of any views, opinions and information, and accordingly, VNDIRECT Securities Corporation, CGS-CIMB and CIMB and their respective affiliates and related persons including China Galaxy International Financial Holdings Limited ("CGIFHL") and CIMB Group Sdn. Bhd. ("CIMBG") and their respective related corporations (and their respective directors, associates, connected persons and/or employees) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof. In particular, VNDIRECT Securities Corporation, CGS-CIMB and CIMB disclaim all responsibility and liability for the views and opinions set out in this report.

Unless otherwise specified, this report is based upon reasonable sources. Such sources will, unless otherwise specified, for market data, be market data and prices available from the main stock exchange or market where the relevant security is listed, or, where appropriate, any other market. Information on the accounts and business of company(ies) will generally be based on published statements of the company(ies), information disseminated by regulatory information services, other publicly available information and information resulting from our research. Whilst every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Past performance is not a reliable indicator of future performance. The value of investments may go down as well as up and those investing may, depending on the investments in question, lose more than the initial investment. No report shall constitute an offer or an invitation by or on behalf of CGS-CIMB, CIMB, or VNDIRECT Securities Corporation, or their respective affiliates (including CGIFHL, CIMBG and their respective related corporations) to any person to buy or sell any investments.

CGS-CIMB, CIMB and/or VNDIRECT Securities Corporation and/or their respective affiliates and related corporations (including CGIFHL, CIMBG and their respective related corporations), their respective directors, associates, connected parties and/or employees may own or have positions in securities of the company(ies) covered in this research report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities. Further, CGS-CIMB, CIMB and/or VNDIRECT Securities Corporation, and/or their respective affiliates and their respective related corporations (including CGIFHL, CIMBG and their respective related corporations) do and seek to do business with the company(ies) covered in this research report and may from time to time act as market maker or have assumed an underwriting commitment in securities of such company(ies), may sell them to or buy them from customers on a principal basis and may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) as well as solicit such investment, advisory or other services from any entity mentioned in this report.

CGS-CIMB, CIMB and/or VNDIRECT Securities Corporation and/or their respective affiliates (including CGIFHL, CIMBG and their respective related corporations) may enter into an agreement with the company(ies) covered in this report relating to the production of research reports. CGS-CIMB, CIMB and/or VNDIRECT Securities Corporation may disclose the contents of this report to the company(ies) covered by it and may have amended the contents of this report following such disclosure.

The analyst responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously. No part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations(s) or view(s) in this report. The analyst(s) who prepared this research report is prohibited from receiving any compensation, incentive or bonus based on specific investment banking transactions or for providing a specific recommendation for, or view of, a particular company. Information barriers and other arrangements may be established where necessary to prevent conflicts of interests arising. However, the analyst(s) may receive compensation that is based on his/their coverage of company(ies) in the performance of his/their duties or the performance of his/their recommendations and the research personnel involved in the preparation of this report may also participate in the solicitation of the businesses as described above. In reviewing this research report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additional information is, subject to the duties of confidentiality,

available on request.

The term “VNDIRECT Securities Corporation” shall, unless the context otherwise requires, mean VNDIRECT Securities Corporation and its affiliates, subsidiaries and related companies. The term “CGS-CIMB” shall denote, where appropriate, the relevant entity distributing or disseminating the report in the particular jurisdiction referenced below, or, in every other case except as otherwise stated herein, CIMB Securities International Pte. Ltd. and its affiliates, subsidiaries and related corporations.

CGS-CIMB

Country	CGS-CIMB Entity	Regulated by
Hong Kong	CGS-CIMB Securities Limited	Securities and Futures Commission Hong Kong
India	CGS-CIMB Securities (India) Private Limited	Securities and Exchange Board of India (SEBI)
Indonesia	PT CGS-CIMB Sekuritas Indonesia	Financial Services Authority of Indonesia
Singapore	CGS-CIMB Research Pte. Ltd.	Monetary Authority of Singapore
South Korea	CGS-CIMB Securities Limited, Korea Branch	Financial Services Commission and Financial Supervisory Service
Thailand	CGS-CIMB Securities (Thailand) Co. Ltd.	Securities and Exchange Commission Thailand

CIMB

Country	CIMB Entity	Regulated by
Malaysia	CIMB Investment Bank Berhad	Securities Commission Malaysia

(i) As of 16 September 2019 VNDIRECT Securities Corporation has a proprietary position in the securities (which may include but not limited to shares, warrants, call warrants and/or any other derivatives) in the following company or companies covered or recommended in this report:

(a) -

(ii) As of 16 September 2019, the analyst(s) who prepared this report, and the associate(s), has / have an interest in the securities (which may include but not limited to shares, warrants, call warrants and/or any other derivatives) in the following company or companies covered or recommended in this report:

(a) -

This report does not purport to contain all the information that a prospective investor may require. CGS-CIMB, and VNDIRECT Securities Corporation and their respective affiliates (including CGIFHL, CIMBG and their related corporations) do not make any guarantee, representation or warranty, express or implied, as to the adequacy, accuracy, completeness, reliability or fairness of any such information and opinion contained in this report. None of CGS-CIMB, CIMB and VNDIRECT Securities Corporation and their respective affiliates nor their related persons (including CGIFHL, CIMBG and their related corporations) shall be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof. This report is general in nature and has been prepared for information purposes only. It is intended for circulation amongst CGS-CIMB's, CIMB's and their respective affiliates' (including CGIFHL's, CIMBG's and their respective related corporations') clients generally and does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. The information and opinions in this report are not and should not be construed or considered as an offer, recommendation or solicitation to buy or sell the subject securities, related investments or other financial instruments or any derivative instrument, or any rights pertaining thereto.

Investors are advised to make their own independent evaluation of the information contained in this research report, consider their own individual investment objectives, financial situation and particular needs and consult their own professional and financial advisers as to the legal, business, financial, tax and other aspects before participating in any transaction in respect of the securities of company(ies) covered in this research report. The securities of such company(ies) may not be eligible for sale in all jurisdictions or to all categories of investors.

Australia: Despite anything in this report to the contrary, this research is provided in Australia by CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited. This research is only available in Australia to persons who are “wholesale clients” (within the meaning of the Corporations Act 2001 (Cth) and is supplied solely for the use of such wholesale clients and shall not be distributed or passed on to any other person. You represent and warrant that if you are in Australia, you are a “wholesale client”. This research is of a general nature only and has been prepared without taking into account the objectives, financial situation or needs of the individual recipient. CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited do not hold, and are not required to hold an Australian financial services license. CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited rely on “passporting” exemptions for entities appropriately licensed by the Monetary Authority of Singapore (under ASIC Class Order 03/1102) and the Securities and Futures Commission in Hong Kong (under ASIC Class Order 03/1103).

Canada: This research report has not been prepared in accordance with the disclosure requirements of Dealer Member Rule 3400 – Research Restrictions and Disclosure Requirements of the Investment Industry Regulatory Organization of Canada. For any research report distributed by CIBC, further disclosures related to CIBC conflicts of interest can be found at <https://researchcentral.cibcwm.com>.

China: For the purpose of this report, the People's Republic of China (“PRC”) does not include the Hong Kong Special Administrative Region, the Macau Special Administrative Region or Taiwan. The distributor of this report has not been approved or licensed by the China Securities Regulatory Commission or any other relevant regulatory authority or governmental agency in the PRC. This report contains only marketing

information. The distribution of this report is not an offer to buy or sell to any person within or outside PRC or a solicitation to any person within or outside of PRC to buy or sell any instruments described herein. This report is being issued outside the PRC to a limited number of institutional investors and may not be provided to any person other than the original recipient and may not be reproduced or used for any other purpose.

France: Only qualified investors within the meaning of French law shall have access to this report. This report shall not be considered as an offer to subscribe to, or used in connection with, any offer for subscription or sale or marketing or direct or indirect distribution of financial instruments and it is not intended as a solicitation for the purchase of any financial instrument.

Germany: This report is only directed at persons who are professional investors as defined in sec 31a(2) of the German Securities Trading Act (WpHG). This publication constitutes research of a non-binding nature on the market situation and the investment instruments cited here at the time of the publication of the information.

The current prices/yields in this issue are based upon closing prices from Bloomberg as of the day preceding publication. Please note that neither the German Federal Financial Supervisory Agency (BaFin), nor any other supervisory authority exercises any control over the content of this report.

Hong Kong: This report is issued and distributed in Hong Kong by CGS-CIMB Securities (Hong Kong) Limited ("CHK") which is licensed in Hong Kong by the Securities and Futures Commission for Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) activities. Any investors wishing to purchase or otherwise deal in the securities covered in this report should contact the Head of Sales at CGS-CIMB Securities (Hong Kong) Limited. The views and opinions in this research report are of VNDIRECT Securities Corporation as of the date hereof and are subject to change. If the Financial Services and Markets Act of the United Kingdom or the rules of the Financial Conduct Authority apply to a recipient, our obligations owed to such recipient therein are unaffected. CHK has no obligation to update its opinion or the information in this research report.

This publication is strictly confidential and is for private circulation only to clients of CHK.

CHK does not make a market on other securities mentioned in the report.

India: This report is issued and distributed in India by CGS-CIMB Securities (India) Private Limited ("CIMB India") which is registered with the National Stock Exchange of India Limited and BSE Limited as a trading and clearing member under the Securities and Exchange Board of India (Stock Brokers and Sub-Brokers) Regulations, 1992. In accordance with the provisions of Regulation 4(g) of the Securities and Exchange Board of India (Investment Advisers) Regulations, 2013, CGS-CIMB India is not required to seek registration with the Securities and Exchange Board of India ("SEBI") as an Investment Adviser. CGS-CIMB India is registered with SEBI as a Research Analyst pursuant to the SEBI (Research Analysts) Regulations, 2014 ("Regulations").

This report does not take into account the particular investment objectives, financial situations, or needs of the recipients. It is not intended for and does not deal with prohibitions on investment due to law/jurisdiction issues etc. which may exist for certain persons/entities. Recipients should rely on their own investigations and take their own professional advice before investment.

The report is not a "prospectus" as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of CGS-CIMB India and they have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues, client feedback and competitive factors. Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed or proposed to be performed by CGS-CIMB India or its affiliates. CIMB India has not received any compensation from the companies mentioned in the report in the past 12 months.

Indonesia: This report is issued and distributed by PT CGS-CIMB Sekuritas Indonesia ("CGS-CIMB Indonesia"). The views and opinions in this research report are our own as of the date hereof and are subject to change. CGS-CIMB Indonesia has no obligation to update its opinion or the information in this research report. Neither this report nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable Indonesian capital market laws and regulations.

This research report is not an offer of securities in Indonesia. The securities referred to in this research report have not been registered with the Financial Services Authority (Otoritas Jasa Keuangan) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market law and regulations.

Ireland: CGS-CIMB is not an investment firm authorised in the Republic of Ireland and no part of this document should be construed as CGS-CIMB acting as, or otherwise claiming or representing to be, an investment firm authorised in the Republic of Ireland.

Malaysia: This report is distributed by CIMB solely for the benefit of and for the exclusive use of our clients. CIMB has no obligation to update, revise or reaffirm its opinion or the information in this research reports after the date of this report.

New Zealand: In New Zealand, this report is for distribution only to persons who are wholesale clients pursuant to section 5C of the Financial Advisers Act 2008.

Singapore: This report is issued and distributed by CGS-CIMB Research Pte Ltd ("CGS-CIMBR"). CGS-CIMBR is a financial adviser licensed under the Financial Advisers Act, Cap 110 ("FAA") for advising on investment products, by issuing or promulgating research analyses or research reports, whether in electronic, print or other form. Accordingly CGS-CIMBR is a subject to the applicable rules under the FAA unless it is able to avail itself to any prescribed exemptions.

Recipients of this report are to contact CGS-CIMB Research Pte Ltd, 50 Raffles Place, #16-02 Singapore Land Tower, Singapore in respect of any matters arising from, or in connection with this report. CGS-CIMBR has no obligation to update its opinion or the information in this

research report. This publication is strictly confidential and is for private circulation only. If you have not been sent this report by CGS-CIMBR directly, you may not rely, use or disclose to anyone else this report or its contents.

If the recipient of this research report is not an accredited investor, expert investor or institutional investor, CGS-CIMBR accepts legal responsibility for the contents of the report without any disclaimer limiting or otherwise curtailing such legal responsibility. If the recipient is an accredited investor, expert investor or institutional investor, the recipient is deemed to acknowledge that CGS-CIMBR is exempt from certain requirements under the FAA and its attendant regulations, and as such, is exempt from complying with the following : (a) Section 25 of the FAA (obligation to disclose product information);

(b) Section 27 (duty not to make recommendation with respect to any investment product without having a reasonable basis where you may be reasonably expected to rely on the recommendation) of the FAA;

(c) MAS Notice on Information to Clients and Product Information Disclosure [Notice No. FAA-N03];

(d) MAS Notice on Recommendation on Investment Products [Notice No. FAA-N16];

(e) Section 36 (obligation on disclosure of interest in securities), and

(f) any other laws, regulations, notices, directive, guidelines, circulars and practice notes which are relates to the above, to the extent permitted by applicable laws, as may be amended from time to time, and any other laws, regulations, notices, directive, guidelines, circulars, and practice notes as we may notify you from time to time. In addition, the recipient who is an accredited investor, expert investor or institutional investor acknowledges that a CGS-CIMBR is exempt from Section 27 of the FAA, the recipient will also not be able to file a civil claim against CGS-CIMBR for any loss or damage arising from the recipient's reliance on any recommendation made by CGS-CIMBR which would otherwise be a right that is available to the recipient under Section 27 of the FAA, the recipient will also not be able to file a civil claim against CGS-CIMBR for any loss or damage arising from the recipient's reliance on any recommendation made by CGS-CIMBR which would otherwise be a right that is available to the recipient under Section 27 of the FAA.

CGS-CIMBR, its affiliates and related corporations, their directors, associates, connected parties and/or employees may own or have positions in securities of the company(ies) covered in this research report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities. Further, CGS-CIMBR, its affiliates and its related corporations do and seek to do business with the company(ies) covered in this research report and may from time to time act as market maker or have assumed an underwriting commitment in securities of such company(ies), may sell them to or buy them from customers on a principal basis and may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) as well as solicit such investment, advisory or other services from any entity mentioned in this report.

As of 16 Sep 2019,, CIMBR does not have a proprietary position in the recommended securities in this report.

CGS-CIMBR does not make a market on the securities mentioned in the report.

South Korea: This report is issued and distributed in South Korea by CGS-CIMB Securities (Hong Kong) Limited, Korea Branch ("CGS-CIMB Korea") which is licensed as a cash equity broker, and regulated by the Financial Services Commission and Financial Supervisory Service of Korea. In South Korea, this report is for distribution only to professional investors under Article 9(5) of the Financial Investment Services and Capital Market Act of Korea ("FSCMA").

Spain: This document is a research report and it is addressed to institutional investors only. The research report is of a general nature and not personalised and does not constitute investment advice so, as the case may be, the recipient must seek proper advice before adopting any investment decision. This document does not constitute a public offering of securities.

CGS-CIMB is not registered with the Spanish Comision Nacional del Mercado de Valores to provide investment services.

Sweden: This report contains only marketing information and has not been approved by the Swedish Financial Supervisory Authority. The distribution of this report is not an offer to sell to any person in Sweden or a solicitation to any person in Sweden to buy any instruments described herein and may not be forwarded to the public in Sweden.

Switzerland: This report has not been prepared in accordance with the recognized self-regulatory minimal standards for research reports of banks issued by the Swiss Bankers' Association (Directives on the Independence of Financial Research).

Thailand: This report is issued and distributed by CGS-CIMB Securities (Thailand) Co. Ltd. ("CGS-CIMB Thailand") based upon sources believed to be reliable (but their accuracy, completeness or correctness is not guaranteed). The statements or expressions of opinion herein were arrived at after due and careful consideration for use as information for investment. Such opinions are subject to change without notice and CGS-CIMB Thailand has no obligation to update its opinion or the information in this research report.

CGS-CIMB Thailand may act or acts as Market Maker, and issuer and offerer of Derivative Warrants and Structured Note which may have the following securities as its underlying securities. Investors should carefully read and study the details of the derivative warrants in the prospectus before making investment decisions.

AAV, ADVANC, AMATA, ANAN, AOT, AP, BA, BANPU, BBL, BCH, BCP, BCPG, BDMS, BEAUTY, BEC, BEM, BJC, BH, BIG, BLA, BLAND, BPP, BTS, CBG, CENTEL, CHG, CK, CKP, COM7, CPALL, CPF, CPN, DELTA, DTAC, EA, EGCO, EPG, GFPT, GLOBAL, GLOW, GPSC, GUNKUL, HMPRO, INTUCH, IRPC, ITD, IVL, KBANK, KCE, KKP, KTB, KTC, LH, LHBANK, LPN, MAJOR, MALEE, MEGA, MINT, MONO, MTLs, PLANB, PSH, PTL, PTG, PTT, PTTEP, PTTGC, QH, RATCH, ROBINS, S, SAWAD, SCB, SCC, SCCC, SIRI, SPALI, SPRC, STEC, STPI, SUPER, TASCO, TCAP, THAI, THANI, THCOM, TISCO, TKN, TMB, TOP, TPIPL, TRUE, TTA, TU, TVO, UNIQ, VGI, WHA, WORK.

Corporate Governance Report:

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 result may be changed after that date. CGS-CIMB Thailand does not confirm nor certify the accuracy of such survey result.

Score Range:	90 - 100	80 – 89	70 - 79	Below 70 or	No Survey Result
Description:	Excellent	Very Good	Good	N/A	

United Arab Emirates: The distributor of this report has not been approved or licensed by the UAE Central Bank or any other relevant licensing authorities or governmental agencies in the United Arab Emirates. This report is strictly private and confidential and has not been reviewed by, deposited or registered with UAE Central Bank or any other licensing authority or governmental agencies in the United Arab Emirates. This report is being issued outside the United Arab Emirates to a limited number of institutional investors and must not be provided to any person other than the original recipient and may not be reproduced or used for any other purpose. Further, the information contained in this report is not intended to lead to the sale of investments under any subscription agreement or the conclusion of any other contract of whatsoever nature within the territory of the United Arab Emirates.

United Kingdom and European Economic Area (EEA): In the United Kingdom and European Economic Area, this material is also being distributed by CGS-CIMB Securities (UK) Limited (“CGS-CIMB UK”). CGS-CIMB UK is authorized and regulated by the Financial Conduct Authority and its registered office is at 27 Knightsbridge, London, SW1X7YB. The material distributed by CGS-CIMB UK has been prepared in accordance with CGS-CIMB’s policies for managing conflicts of interest arising as a result of publication and distribution of this material. This material is for distribution only to, and is solely directed at, selected persons on the basis that those persons: (a) are eligible counterparties and professional clients of CGS-CIMB UK; (b) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “Order”), (c) fall within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc”) of the Order; (d) are outside the United Kingdom subject to relevant regulation in each jurisdiction, material(all such persons together being referred to as “relevant persons”). This material is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this material relates is available only to relevant persons and will be engaged in only with relevant persons.

Where this material is labelled as non-independent, it does not provide an impartial or objective assessment of the subject matter and does not constitute independent “research” (cannot remove research from here under the applicable rules of the Financial Conduct Authority in the UK. Consequently, any such non-independent material will not have been prepared in accordance with legal requirements designed to promote the independence of research (cannot remove research from here) and will not subject to any prohibition on dealing ahead of the dissemination of research. Any such non-independent material must be considered as a marketing communication.

United States: This research report is distributed in the United States of America by CGS-CIMB Securities (USA) Inc, a U.S. registered broker-dealer and a related company of CGS-CIMB Research Pte Ltd, PT CGS-CIMB Sekuritas Indonesia, CGS-CIMB Securities (Thailand) Co. Ltd, CGS-CIMB Securities (Hong Kong) Limited, CGS-CIMB Securities (India) Private Limited, and is distributed solely to persons who qualify as “U.S. Institutional Investors” as defined in Rule 15a-6 under the Securities and Exchange Act of 1934. This communication is only for Institutional Investors whose ordinary business activities involve investing in shares, bonds, and associated securities and/or derivative securities and who have professional experience in such investments. Any person who is not a U.S. Institutional Investor or Major Institutional Investor must not rely on this communication. The delivery of this research report to any person in the United States of America is not a recommendation to effect any transactions in the securities discussed herein, or an endorsement of any opinion expressed herein. CGS-CIMB Securities (USA) Inc. is a FINRA/SIPC member and takes responsibility for the content of this report. For further information or to place an order in any of the above-mentioned securities please contact a registered representative of CGS-CIMB Securities (USA) Inc.

CGS-CIMB Securities (USA) Inc. does not make a market on other securities mentioned in the report.

CGS-CIMB Securities (USA) Inc. has not managed or co-managed a public offering of any of the securities mentioned in the past 12 months.

CGS-CIMB Securities (USA) Inc. has not received compensation for investment banking services from any of the company mentioned in the past 12 months.

CGS-CIMB Securities (USA) Inc. neither expects to receive nor intends to seek compensation for investment banking services from any of the company mentioned within the next 3 months.

Other jurisdictions: In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is only for distribution to professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

RECOMMENDATION FRAMEWORK

Stock Ratings

Definition:

- Add The stock's total return is expected to reach 15% or higher over the next 12 months.
- Hold The stock's total return is expected to be between negative 10% and positive 15% over the next 12 months.
- Reduce The stock's total return is expected to fall below negative 10% over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings

Definition:

- Overweight An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
- Neutral A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
- Underweight An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings

Definition:

- Overweight An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
- Neutral A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
- Underweight An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.

Hien Tran Khanh – Deputy Head of Research

Email: hien.trankhanh@vndirect.com.vn

Nguyen Tien Duc – Analyst

Email: duc.nguyentien2@vndirect.com.vn

VNDIRECT Securities Corporation

1 Nguyen Thuong Hien Str – Hai Ba Trung Dist – Ha Noi

Tel: +84 2439724568

Email: research@vndirect.com.vn

Website: <https://vndirect.com.vn>