

Vietnam

ADD (no change)

Consensus ratings*: Buy 3 Hold 4 Sell 0

Current price:	VND60,100
Target price:	VND73,800
Previous target:	VND73,800
Up/downside:	22.8%
CGS-CIMB / Consensus:	25.5%
Reuters:	VCB.HM
Bloomberg:	VCB VN
Market cap:	US\$9,604m
	VND222,903,536m
Average daily turnover:	US\$2.53m
	VND58,903m
Current shares o/s:	3,709m
Free float:	1.8%
*Source: Bloomberg	

Key changes in this note

- FY19-20F EPS increased by 20%.



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	7.7	8.5	-9.2
Relative (%)	-0.7	1.5	0

Major shareholders

	% held
State Bank of Vietnam	74.8
Mizuho Corporate Bank	15.0
GIC Private Limited	2.6

Analyst(s)

Thuy LE Minh

T (84) 96 784 4629

E thuy.leminh@vndirect.com.vn

Vietcombank

Strong earnings beat expectations

- FY18 net profit was VND14,642bn (+61.1% yoy), 22% above our forecast.
- Robust net profit growth was driven by strong core earnings growth, well-controlled operating expenses and one-off income from equity divestment.
- We reiterate Add on VCB but maintain our TP at VND73,800 despite the company beating our earnings expectation as we use a lower target multiple.

NIM jumps 30bp yoy due to strong push into individual lending

With the State Bank of Vietnam (SBV) limiting VCB's credit quota, the bank actively shifted to higher-yielding individual loans to further improve net interest margin (NIM). In FY18, the individual loan book grew 32.9% yoy, outpacing the overall loan book growth of 16.4% yoy. As such, NIM rose 30bp yoy, leading to 29.5% growth in net interest income.

Non-interest income records impressive growth of 45.7% yoy

Robust growth in non-interest income was driven by: bad debt recovery (+49.8% yoy), income from long-term equity divestment (increased 11x yoy), and 34.0% yoy growth in net fee income, due to higher payment fees and higher service charges applied in early 2018. In FY18, VCB booked VND1,557bn in one-off income from long-term equity divestment, with most of this arising from the divestment from Military Bank (MBB VN, Add) and Eximbank (EIB VN, Not rated). Strong earnings growth and a fall in the cost-to-income ratio (CIR) from 40.4% in FY17 to 34.6% in FY18 led to a 61.1% earnings growth.

Asset quality closely controlled despite a rise in bad debt

The non-performing loan (NPL) ratio was kept at 1.0% as of end-FY18, lower than 1.1% at end-FY17. In order to keep a lid on the NPL ratio, VCB ramped up loan write-offs in 4Q18, with the annualised write-off rate rising from 0.3% in 9M18 to 0.7% by end-FY18. As such, the NPL ratio fell from 1.2% at end-9M18 to 1.0% at end-FY18. A 46.4% yoy growth in FY18 pre-provision profit created the financial capacity to write-off bad debts. Besides a lower NPL ratio, loan-loss-reserves also soared from 130.7% in FY17 to 165.3% in FY18.

Successful private placement improves capital buffer

In Jan 2019, VCB completed a 3% private placement at VND55,510/share to raise VND6,168bn of fresh capital. The new shares were bought by Mizuho and GIC, who now hold 15.00% and 2.55% stakes post issuance, respectively. We estimate that, post-issuance, VCB's Basel II capital adequacy ratio (CAR) will be 8.9% for FY19.

We maintain our TP of VND73,800 and reiterate Add rating on VCB

FY19-20F EPS forecast raised by 19.7-19.8%, respectively, on higher NIM, lower CIR and lower credit cost assumptions. Our TP is based on residual income (50% weighting, COE: 14.5%, LTG: 4.0%) and P/BV multiple (50% weighting, 3.4x FY19F P/BV). We reduce our target P/BV from 3.8x to 3.4x to reflect the stock price correction seen in FY18. Upside catalysts include a potential exclusive bancassurance deal, worth up to US\$1bn. Downside risk includes higher NPL than our forecasts which will increase credit costs.

Financial Summary

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Net Interest Income (VNDb)	21,938	28,409	32,972	38,513	44,591
Total Non-Interest Income (VNDb)	7,469	10,879	11,403	13,149	15,174
Operating Revenue (VNDb)	29,406	39,288	44,375	51,662	59,765
Total Provision Charges (VNDb)	(6,198)	(7,379)	(7,685)	(8,838)	(10,253)
Net Profit (VNDb)	9,091	14,642	16,219	18,970	21,922
Core EPS (VND)	2,103	3,386	3,638	4,255	4,918
Core EPS Growth	16.9%	61.0%	7.5%	17.0%	15.6%
FD Core P/E (x)	28.57	17.75	16.52	14.12	12.22
DPS (VND)	799.9	800.0	800.0	800.0	800.0
Dividend Yield	1.33%	1.33%	1.33%	1.33%	1.33%
BVPS (VND)	14,584	17,739	22,343	26,540	31,514
P/BV (x)	4.12	3.39	2.69	2.26	1.91
ROE	15.1%	21.0%	18.4%	17.4%	16.9%
% Change In Core EPS Estimates			19.7%	19.8%	
CIMB/consensus EPS (x)			1.19	1.15	1.08

SOURCES: VND RESEARCH, COMPANY REPORTS

Strong earnings beat expectations

FY18 recap: High core earnings coupled with well-controlled operating expenses and sizable one-off income

Figure 1: Results comparison (VND bn unless otherwise noted)

Profit & Loss statement	4Q18	4Q17	yoy%	3Q18	qoq%	FY18	FY17	yoy%	VND FY18 forecasts	% VND FY18 forecasts	Comment
Net interest income	7,981	5,777	38%	7,432	7%	28,409	21,938	30%	26,921	106%	Above our forecasts as actual NIM in FY18 (2.8%) was higher than our forecast (2.5%). VCB's active push in individual loans (+32.9% yoy in FY18) was better than our expectation, and helped boost FY18 NIM by 30bp yoy.
Non-interest income	2,710	1,755	54%	1,983	37%	10,879	7,469	46%	10,463	104%	Above our forecasts due to VND1,126bn one-off income from long-term equity divestment (divested from MBB and EIB), which was booked in 4Q18.
Operating revenue	10,690	7,532	42%	9,414	14%	39,288	29,406	34%	37,385	105%	
Operation expenses	(1,693)	(2,433)	-30%	(3,986)	-58%	(13,610)	(11,866)	15%	(15,702)	87%	Below our forecasts due to lower salary expenses than our projections. In FY17, salary per employee grew 19.6% yoy, but it only grew 8.5% yoy in FY18. We believe there was adjustment in salary in FY17 as VCB pushed for retail loan expansion, and salary expenses growth slowed down after adjustment in FY17.
Pre-provision profit	8,997	5,099	76%	5,429	66%	25,679	17,540	46%	21,683	118%	
Provision expenses	(2,381)	(1,692)	41%	(1,762)	35%	(7,379)	(6,198)	19%	(6,718)	110%	Above our forecasts as VCB increased loan write-offs to lower NPL ratio amid rising bad debt in FY18.
Pre-tax profit	6,617	3,407	94%	3,666	80%	18,300	11,341	61%	14,965	122%	
Net profit	5,276	2,725	94%	2,935	80%	14,642	9,091	61%	11,996	122%	

SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 2: VCB's key ratios by quarter

	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18
NII/Total Operating Income (TOI)	72.4%	77.2%	72.0%	76.7%	62.4%	73.4%	78.9%	74.7%
Non-II/TOI	27.6%	22.8%	28.0%	23.3%	37.6%	26.6%	21.1%	25.3%
NIM (trailing 12 months)	2.7%	2.7%	2.6%	2.5%	2.6%	2.7%	2.8%	2.8%
Loan-to-deposit ratio	72.4%	72.4%	70.1%	67.4%	71.9%	72.3%	74.4%	69.1%
NPL	1.5%	1.5%	1.2%	1.1%	1.4%	1.2%	1.2%	1.0%
LLR	128.9%	140.3%	164.8%	130.7%	121.4%	140.6%	155.5%	165.3%
Credit cost (annualised)	1.2%	1.2%	1.2%	1.2%	1.1%	1.1%	1.1%	1.3%
ROAA (trailing 12m)	1.0%	1.0%	1.0%	1.0%	1.2%	1.2%	1.3%	1.4%
ROAE (trailing 12m)	14.8%	15.2%	16.0%	17.9%	19.5%	20.5%	20.9%	25.2%

SOURCES: VND RESEARCH, COMPANY REPORTS

OUTLOOK: Stable earnings growth going forward

Figure 3: Earnings revision (VND bn, otherwise noted)

	Old forecasts		New forecasts		Change		Comments
	FY19F	FY20F	FY19F	FY20F	FY19F	FY20F	
Net Interest Income	31,654	37,362	32,972	38,513	4.2%	3.1%	We increase our NIM forecasts by 36bp and 34bp for FY19-20F respectively, to reflect VCB's robust expansion in higher-yielding individual loans in FY18.
Non-Interest Income	11,385	12,670	11,403	13,149	0.2%	3.8%	Higher non-interest income forecasts are due to higher net fee growth assumptions as VCB have actively developed its fee-based products, such as launching new cards products and Priority Banking program for high-income customers.
Operating revenue	43,038	50,033	44,375	51,662	3.1%	3.3%	
Operating expenses	(18,076)	(21,014)	(16,419)	(19,115)	-9.2%	-9.0%	We adjust downward our CIR assumptions for FY19-20F from 42% to 37% as salary expenses increased at a slower pace than our expectation in 2018 and we project salary expenses maintain the same growth rate in FY19-20F.
Pre-provision profit	24,962	29,019	27,956	32,547	12.0%	12.2%	
Provision expenses	(7,726)	(8,885)	(7,685)	(8,838)	-0.5%	-0.5%	
Pre-tax profit	17,236	20,134	20,271	23,709	17.6%	17.8%	
Net profit	13,816	16,139	16,219	18,970	17.4%	17.5%	

SOURCES: VND RESEARCH

Robust net profit growth in FY18 (+61.1% yoy) was driven by: 1) a 30bp yoy NIM expansion; 2) strong fee income growth (+34.0% yoy); 3) a surge in income from bad debt recovery (+49.8% yoy); and 4) extraordinary income from long-term equity investment, which accounted for 14.3% of FY18 non-interest income. In our view, FY18 results set a high base for FY19F. VCB wrote-off a sizable amount of bad debt in FY17 (write-off rate was 1.2% in FY17), leading to high bad debt recovery in FY18. The pace of loan write-offs was tempered down in FY18, with a write-off rate of just 0.7%. As a result, we forecast a lower growth in income from bad debt recoveries in FY19F (historically, write-off reversals have been a meaningful source of income for the bank). In addition, the absence of extraordinary income from equity divestment will also lead to a lower profit growth in FY19F. We expect profit growth to moderate from the robust pace seen in FY18, and forecast a net profit growth of 10.8% for FY19F.

VALUATION

We maintain Add on VCB with an unchanged target price of VND73,800

We lift our EPS forecasts for FY19-20F by 19.7-19.8% respectively, due to higher NIM forecasts, lower CIR and lower credit cost projections. Our target price is derived from a combination of residual income valuation (50% weighting, COE:14.5%, LTG: 4.0%) and the relative P/BV multiple valuation (50% weighting). For the P/BV multiple valuation, we apply VCB's six-month historical P/BV of 3.4x for FY19F, which is lower than the target P/BV of 3.8x in our previous update, as the stock has corrected since Apr 2018 on worsening market sentiment, and we see a very low likelihood of the valuation returning to the high levels seen in early-2018. At this target price, the upside works out to 22.8% and we therefore reiterate our Add rating on the stock.

Figure 4: Our target price calculation

Approach	Weight	Fair value (VND/share)	Contribution (VND/share)
Residual income	50%	71,731	35,865
P/BV multiple (at 3.4x FY19F BVPS)	50%	75,965	37,983
Target price (VND/share)			73,848
Target price (VND/share, rounded)			73,800

SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 5: Key assumptions of residual income valuation, based on our estimates

Assumptions	2019F	2020F	2021F	2022F	2023F
Risk free rate	5.0%	5.0%	5.0%	5.0%	5.0%
Equity risk premium	11.0%	11.0%	11.0%	11.0%	11.0%
Beta	0.9	0.9	0.9	0.9	0.9
Cost of equity	14.5%	14.5%	14.5%	14.5%	14.5%
Long-term growth rate					
Long-run COE					
<i>(In VND bn, otherwise noted)</i>					
Opening shareholders' equity	63,820				
PV of RI (5 years)	24,212				
PV of Terminal value	178,008				
Implied EV	266,040				
No. of outstanding shares (m shares)	3,709				
Implied value per share (VND/share)	71,731				

SOURCES: VND RESEARCH, COMPANY REPORTS

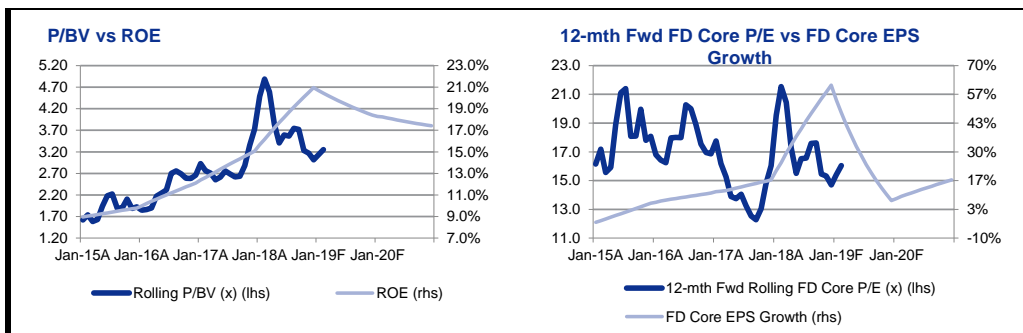
Figure 6: Regional peer comparison

Company	Bloomberg Ticker	Recomm endation	Closing price (local curr.)	Target Price (local curr.)	Market cap (US\$m)	P/BV(x)		P/E (x)		3-yr Forward CAGR EPS		ROE (%)	
						Dec-19F	Dec-20F	Dec-19F	Dec-20F	%	Dec-19F	Dec-20F	
HDFC Bank	HDFCB IN	ADD	2,116	2,500	80,802	3.5	3.0	22.5	18.1	22.0%	16.8%	17.8%	
Bank Central Asia	BBCA IJ	HOLD	27,525	25,500	48,229	3.9	3.4	22.6	20.2	13.0%	18.4%	17.8%	
Bank Rakyat Indonesia	BBRI IJ	ADD	3,910	4,500	34,275	2.3	2.0	13.0	11.4	13.9%	18.8%	18.8%	
ICICI Bank	ICICIB IN	ADD	351	450	31,772	2.0	1.8	17.2	13.2	35.8%	11.9%	14.1%	
Bank Mandiri	BMRI IJ	ADD	7,325	8,800	24,293	1.7	1.5	12.0	10.4	15.4%	14.9%	15.5%	
Public Bank Bhd	PBK MK	HOLD	25	26	23,803	2.2	2.0	15.9	15.1	7.0%	14.4%	14.1%	
Indusind Bank	IIB IN	ADD	1,472	2,100	12,448	2.9	2.4	16.9	13.3	24.6%	18.3%	19.6%	
Yes Bank	YES IN	HOLD	215	230	6,985	1.5	1.2	8.4	6.5	24.0%	19.1%	20.9%	
Military Commercial Joint Stock Bank	MBB VN	ADD	22,100	31,100	2,057	1.2	1.0	6.9	5.9	32.0%	17.9%	17.9%	
Average regional peers						2.3	2.0	15.0	12.7	20.8%	16.7%	17.4%	
Vietcombank	VCB VN	ADD	60,100	73,800	9,604	2.7	2.3	13.7	11.8	13.2%	18.4%	17.4%	

PRICE AS OF 21 FEB 2019

SOURCES: CGS-CIMB RESEARCH, VND RESEARCH

BY THE NUMBERS



Profit & Loss

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Net Interest Income	21,938	28,409	32,972	38,513	44,591
Total Non-Interest Income	7,469	10,879	11,403	13,149	15,174
Operating Revenue	29,406	39,288	44,375	51,662	59,765
Total Non-Interest Expenses	(11,866)	(13,610)	(16,419)	(19,115)	(22,113)
Pre-provision Operating Profit	17,540	25,679	27,956	32,547	37,652
Total Provision Charges	(6,198)	(7,379)	(7,685)	(8,838)	(10,253)
Operating Profit After Provisions	11,341	18,300	20,271	23,709	27,399
Pretax Income/(Loss) from Assoc.	0	0	0	0	0
Operating EBIT (incl Associates)	11,341	18,300	20,271	23,709	27,399
Non-Operating Income/(Expense)	0	0	0	0	0
Profit Before Tax (pre-EI)	11,341	18,300	20,271	23,709	27,399
Exceptional Items					
Pre-tax Profit	11,341	18,300	20,271	23,709	27,399
Taxation	(2,231)	(3,642)	(4,034)	(4,718)	(5,453)
Consolidation Adjustments & Others					
Exceptional Income - post-tax					
Profit After Tax	9,111	14,658	16,237	18,991	21,946
Minority Interests	(20)	(16)	(18)	(21)	(25)
Pref. & Special Div	0	0	0	0	0
FX And Other Adj.	0	0	0	0	0
Net Profit	9,091	14,642	16,219	18,970	21,922
Recurring Net Profit	7,568	12,182	13,494	15,783	18,239

Balance Sheet Employment

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Gross Loans/Cust Deposits	76.7%	78.9%	81.0%	82.4%	83.5%
Avg Loans/Avg Deposits	77.3%	77.8%	80.0%	81.7%	83.0%
Avg Liquid Assets/Avg Assets	43.5%	42.7%	38.9%	37.9%	37.0%
Avg Liquid Assets/Avg IEAs	44.6%	43.9%	39.9%	38.7%	37.7%
Net Cust Loans/Assets	51.7%	58.0%	59.3%	60.5%	61.4%
Net Cust Loans/Broad Deposits	67.4%	69.1%	70.7%	71.7%	72.4%
Equity & Provs/Gross Cust Loans	11.1%	11.7%	13.3%	13.8%	14.4%
Asset Risk Weighting	59.2%	69.4%	67.3%	68.5%	69.5%
Provision Charge/Avg Cust Loans	1.23%	1.25%	1.13%	1.13%	1.14%
Provision Charge/Avg Assets	0.68%	0.70%	0.68%	0.69%	0.71%
Total Write Offs/Average Assets	0.68%	0.49%	0.39%	0.40%	0.40%

SOURCES: VND RESEARCH, COMPANY REPORTS

BY THE NUMBERS... cont'd

Balance Sheet

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Total Gross Loans	776,408	880,889	1,000,609	1,139,777	1,304,681
Liquid Assets & Invst. (Current)	234,069	163,072	176,112	190,201	205,417
Other Int. Earning Assets					
Total Gross Int. Earning Assets	1,010,477	1,043,960	1,176,721	1,329,978	1,510,098
Total Provisions/Loan Loss Reserve	(8,113)	(10,274)	(13,538)	(17,293)	(21,700)
Total Net Interest Earning Assets	1,002,364	1,033,686	1,163,183	1,312,686	1,488,399
Intangible Assets	1,964	2,068	2,147	2,228	2,313
Other Non-Interest Earning Assets	20,862	24,437	25,366	26,330	27,331
Total Non-Interest Earning Assets	22,826	26,505	27,513	28,559	29,644
Cash And Marketable Securities	10,103	12,792	13,278	13,783	14,307
Long-term Investments	0	0	0	0	0
Total Assets	1,035,293	1,072,983	1,203,974	1,355,028	1,532,350
Customer Interest-Bearing Liabilities	726,734	823,684	922,312	1,041,974	1,182,507
Bank Deposits	66,942	76,524	88,002	101,202	116,383
Interest Bearing Liabilities: Others	171,408	90,711	92,525	94,376	96,263
Total Interest-Bearing Liabilities	965,085	990,919	1,102,839	1,237,552	1,395,153
Bank's Liabilities Under Acceptances					
Total Non-Interest Bearing Liabilities	17,651	18,175	18,197	18,972	20,243
Total Liabilities	982,735	1,009,094	1,121,036	1,256,524	1,415,396
Shareholders' Equity	52,469	63,820	82,867	98,433	116,883
Minority Interests	(89)	(69)	(71)	(71)	(71)
Total Equity	52,379	63,751	82,795	98,362	116,812

Key Ratios

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Total Income Growth	18.2%	33.6%	12.9%	16.4%	15.7%
Operating Profit Growth	17.5%	46.4%	8.9%	16.4%	15.7%
Pretax Profit Growth	33.1%	61.4%	10.8%	17.0%	15.6%
Net Interest To Total Income	74.6%	72.3%	74.3%	74.5%	74.6%
Cost Of Funds	2.86%	2.81%	2.99%	3.09%	3.15%
Return On Interest Earning Assets	5.20%	5.44%	5.79%	5.96%	6.06%
Net Interest Spread	2.33%	2.63%	2.80%	2.87%	2.91%
Net Interest Margin (Avg Deposits)	3.38%	3.76%	3.88%	4.02%	4.11%
Net Interest Margin (Avg RWA)	3.98%	4.19%	4.24%	4.43%	4.47%
Provisions to Pre Prov. Operating Profit	35.3%	28.7%	27.5%	27.2%	27.2%
Interest Return On Average Assets	2.41%	2.70%	2.90%	3.01%	3.09%
Effective Tax Rate	19.7%	19.9%	19.9%	19.9%	19.9%
Net Dividend Payout Ratio	31.7%	20.3%	18.3%	15.6%	13.5%
Return On Average Assets	1.00%	1.39%	1.42%	1.48%	1.52%

Key Drivers

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Loan Growth (%)	17.9%	16.4%	15.0%	15.0%	15.0%
Net Interest Margin (%)	2.5%	2.8%	3.0%	3.1%	3.1%
Non Interest Income Growth (%)	17.6%	45.7%	4.8%	15.3%	15.4%
Cost-income Ratio (%)	40.4%	34.6%	37.0%	37.0%	37.0%
Net NPL Ratio (%)	-3.2%	-3.9%	-4.3%	-4.6%	-4.9%
Loan Loss Reserve (%)	130.7%	165.3%	180.8%	193.2%	204.0%
GP Ratio (%)	0.8%	0.8%	0.9%	1.1%	1.2%
Tier 1 Ratio (%)	8.0%	8.2%	9.9%	10.3%	10.7%
Total CAR (%)	11.6%	10.2%	11.5%	11.5%	11.6%
Deposit Growth (%)	20.0%	13.2%	12.0%	13.0%	13.5%
Loan-deposit Ratio (%)	75.6%	77.6%	79.5%	80.7%	81.6%
Gross NPL Ratio (%)	1.1%	1.0%	1.0%	1.1%	1.1%
Fee Income Growth (%)	20.5%	34.0%	35.0%	30.0%	25.0%

SOURCES: VND RESEARCH, COMPANY REPORTS

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 February 22, 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 February 22, 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.

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.

CGS-CIMB India has not received any investment banking related compensation from the companies mentioned in the report in the past 12 months.

CGS-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 in Malaysia by CIMB solely for the benefit of and for the exclusive use of our clients. Recipients of this report are to contact CIMB, at 17th Floor Menara CIMB No. 1 Jalan Stesen Sentral 2, Kuala Lumpur Sentral 50470 Kuala Lumpur, Malaysia, in respect of any matters arising from or in connection with this report. 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 February 22, 2019,, CGS-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, TASCOS, 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 be 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.

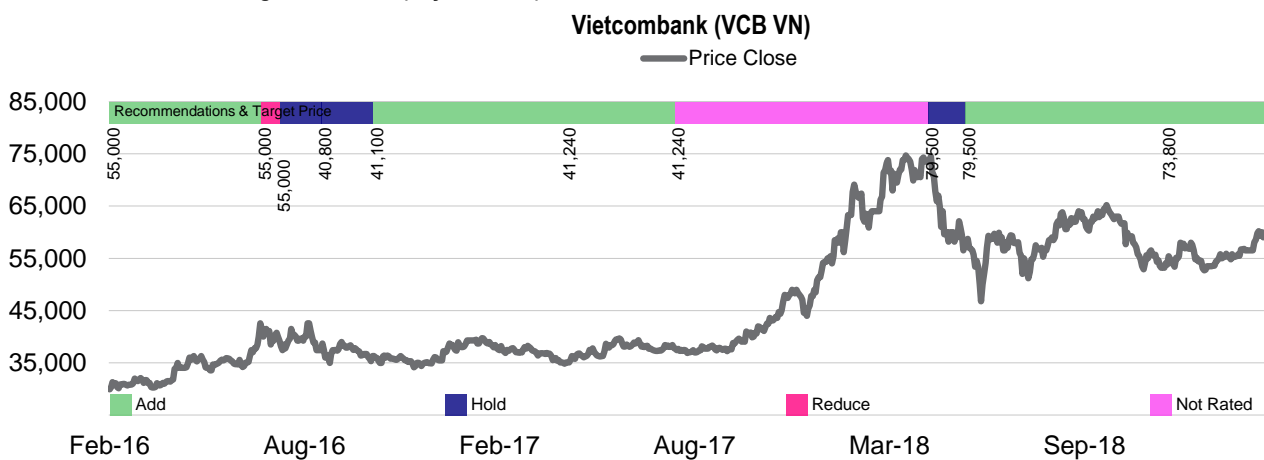
CGS-CIMB Securities (USA) Inc. has not received compensation for investment banking services from any of the company mentioned in the past 12 months.

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.

Distribution of stock ratings and investment banking clients for quarter ended on 31 December 2018		
758 companies under coverage for quarter ended on 31 December 2018		
	Rating Distribution (%)	Investment Banking clients (%)
Add	61.2%	4.2%
Hold	25.1%	2.1%
Reduce	13.7%	0.4%

Spitzer Chart for stock being researched (2 year data)



Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2018, Anti-Corruption 2018

ADVANC – Excellent, Certified, **AEONTS** – Good, n/a, **AH** – Very Good, n/a, **AMATA** – Excellent, Declared, **ANAN** – Excellent, Declared, **AOT** – Excellent, Declared, **AP** – Excellent, Certified, **ASP** – Very Good, Certified, **BANPU** – Excellent, Certified, **BAY** – Excellent, Certified, **BBL** – Very Good, Certified, **BCH** – Good, Certified, **BCP** – Excellent, Certified, **BCPG** – Excellent, Certified, **BEM** – Very Good, n/a, **BDMS** – Very Good, n/a, **BEAUTY** – Good, n/a, **BEC** – Very Good, n/a, **BGRIM** – Very Good, Declared, **BH** – Good, n/a, **BJC** – Very Good, Declared, **BJCHI** – Very Good, Certified, **BPP** – Very Good, Declared, **BR** – Good, Declared, **BTS** – Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – Good, n/a, **CENTEL** – Very Good, Certified, **CHG** – Very Good, Declared, **CK** – Excellent, n/a, **COL** – Excellent, Declared, **CPALL** – Very Good, Certified, **CPF** – Excellent, Certified, **CPN** – Excellent, Certified, **DELTA** – Excellent, n/a, **DEMCO** – Excellent, Certified, **DDD** – Very Good, Declared, **DIF** – not available, n/a, **DTAC** – Excellent, Certified, **EA** – Excellent, n/a, **ECL** – Very Good, Certified, **EGCO** – Excellent, Certified, **EPG** – Very Good, n/a, **ERW** – Very Good, n/a, **GFPT** – Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Very Good, n/a, **GLOW** – Very Good, Certified, **GPSC** – Excellent, Certified, **GULF** – Very Good, n/a, **GUNKUL** – Excellent, Certified, **HANA** – Excellent, Certified, **HMPRO** – Excellent, Certified, **HREIT** – Excellent, Certified, **ICHI** – Excellent, Declared, **HUMAN** – not available, n/a, **III** – Good, n/a, **INTUCH** – Excellent, Certified, **IRPC** – Excellent, Certified, **ITD*** – Very Good, n/a, **IVL** – Excellent, Certified, **JASIF** – not available, n/a, **KBANK** – Excellent, Certified, **KCE** – Excellent, Certified, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** – Excellent, Certified, **KTC** – Excellent, Certified, **LH** – Very Good, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MACO** – Very Good, n/a, **MAJOR** – Very Good, n/a, **MAKRO** – Excellent, Declared, **MALEE** – Very Good, Certified, **MC** – Very Good, Certified, **MCOT** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** – Excellent, Certified, **MTC** – Excellent, Declared, **NETBAY** – Good, n/a, **PLANB** – Excellent, Declared, **PLAT** – Very Good, Certified, **PSH** – Excellent, Certified, **PSTC** – Good, Certified, **PTT** – Excellent, Certified, **PTTEP** – Excellent, Certified, **PTTGC** – Excellent, Certified, **QH** – Excellent, Certified, **RATCH** – Excellent, Certified, **ROBINS** – Excellent, Certified, **RS** – Very Good, n/a, **RSP** – not available, n/a, **SAMART** – Excellent, n/a, **SAPPE** – Very Good, Declared, **SAT** – Excellent, Certified, **SAWAD** – Very Good, n/a, **SC** – Excellent, Declared, **SCB** – Excellent, Certified, **SCC** – Excellent, Certified, **SCN** – Very Good, Certified, **SF** – Good, n/a, **SIRI** – Very Good, Certified, **SPA** – Good, n/a, **SPALI** – Excellent, n/a, **SPRC** – Excellent, Certified, **STA** – Very Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, Declared, **TASCO** – Excellent, Certified, **TCAP** – Excellent, Certified, **TIPCO** – Very Good, Certified, **TISCO** – Excellent, Certified, **TKN** – Very Good, Declared, **TMB** – Excellent, Certified, **TNR** – Very Good, Declared, **TOP** – Excellent, Certified, **TPCH** – Good, n/a, **TPIPP** – Good, n/a, **TRUE** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Very Good, Declared, **UNIQ** – Good, n/a, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – not available, n/a, **WORK** – Good, n/a.

Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of August 31, 2018) are categorized into:

- Companies that have declared their intention to join CAC, and
- Companies certified by CAC

* The company, its director or management had been reportedly accused for breaching proper corporate governance such as violation of the SEC's regulations or charged with corruption.

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.

Anirban Lahiri – Head of Research

Email: anirban.lahiri@vndirect.com.vn

Thuy LE Minh – Analyst

Email: thuy.leminh@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>