

March, 2021

HOA PHAT GROUP JSC (HSX: HPG)

Maintaining high NPAT growth due to the HRC segment

(VND bn)	4Q-FY20	3Q-FY20	+/- qoq	4Q-FY19	+/- yoy
Net revenue	25,778	24,686	4%	17,975	43%
PAT	4,638	3,773	23%	1,917	142%
EBIT	5,770	4,707	23%	2,460	135%
EBIT margin	22.4%	19.1%	331bps	13.7%	870bps

Source: HPG, Rong Viet Securities

2020: A successful year in key segments

- HPG's revenue, and NPAT increased by 42% and 79% respectively owing to the additional construction steel and HRC capacity from Dung Quat Steel Complex, and the strong demand for steel billets and HRC.
- Finished construction steel, HRC, and steel pipe volumes came at 3.4 million tons (+22.5% YoY), 580,000 tons, and 821,800 tons (+9.5% YoY) respectively. HPG's market share in construction steel increased from 26.2% in 2019 to 32.5% in 2020.
- Steel billet selling volume surged by 700% YoY to roughly 1.8 million tons due to the strong demand from China.
- Agriculture segment's NPAT reached roughly VND 1,700 billion, growing by 250% YoY.

2021: Flat steel segment will boost NPAT growth

We expect that HPG's revenue and NPAT will increase by roughly 60% and 70% respectively mainly owing to the strong growth in HRC sales. HPG's HRC and construction steel selling volumes are forecasted to increase by 330% and 10%, reaching 3.0 million tons and 3.8 million tons respectively. Due to the strong demand, HPG's coated steel factory can run at full capacity, producing roughly 400,000 tons of products (+120% YoY).

HPG's GPM can improve slightly from 21.0% in 2020 to 21.4% in 2021, based on the high profitability of the steel segment in 1H. For 2H, we think a possible correction in steel prices can harm HPG's GPM. In the base case, we expect yearly average HRC and construction steel prices will be USD 645/ton and VND 13.5 mn/ton respectively. Besides, yearly average iron ore and coking coal prices will be USD 153/ton and USD 118/ton respectively.

Valuation and recommendation

We think HPG can maintain strong NPAT growth momentum in 2021 mainly due to the favorable market condition in the HRC segment. Currently, steel demand has been recovering quickly in large markets, such as China, India and the EU. Besides, weak iron ore supply and expensive transportation costs for steel imports led to increasing imported HRC price. This brings a higher gross margin for domestic HRC manufacturers, including HPG. Besides, we expect that the company's steel pipe and coated steel sales can grow strongly owing to the internal HRC capacity. Hence, the flat steel segment can contribute half of the total gross profit in 2021 and be the most profitable segment. In the construction steel segment, HPG can maintain its price competitiveness and increase its selling volume at a higher pace compared to the industry.

Using FCFF, PE, and PB methods, we come up with a fair value of VND **55,200** per share (+19% from our TP in the 2021 strategy report). Together with a cash dividend in the next 12 months of VND 500/share, **the total return is 20%**, based on the closing price as of March 31st, 2021. Hence, we reiterate our **BUY** recommendation.

BUY 20%

Target price (VND)	55,200
Current market price (VND)	46,800

Cash Dividend (VND)* 500

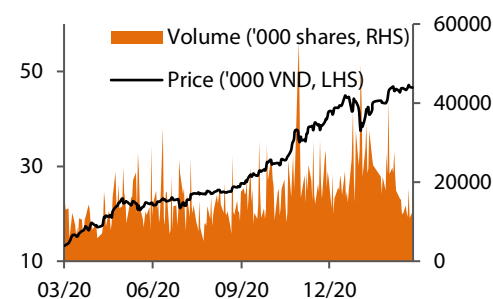
* Expected in the next 12 months

Stock Info

Sector	Basic Materials
Market Cap (VND billion)	150,589
Current Shares O/S (million)	3,313
Avg. Daily Volume (in 20 sessions)	17,454,395
Free float (%)	52
52 week High	47,150
52 week Low	13,253
Beta	1.2

	FY2019	TTM
EPS	2,556	3,813
EPS Growth (%)	-32.6	49.2
Diluted EPS	2,023	3,813
P/E	8.6	6.6
P/B	1.4	2.3
EV/EBITDA	7.7	7.7
Cash dividend yield (%)	0.0	1.2
ROE (%)	15.8	22.8

Price performance



Major Shareholders (%)

Tran Dinh Long	26.1
Vu Thi Hien	7.3
Remaining ownership room (%)	18.7

Tu Pham

(084) 028- 6299 2006 – Ext: 1536

tu.pm@vdsc.com.vn

Trinh Nguyen

(084) 028- 6299 2006 – Ext: 1551

trinh.nh@vdsc.com.vn

Exhibit 1: 4Q/2020 Results

(VND Bn)	4Q-FY20	3Q-FY20	+/- (qoq)	4Q-FY19	+/- (yoy)
Net revenue	25,778	24,686	4.4%	17,975	43.4%
Gross profit	6,267	5,169	21.2%	2,836	121.0%
SG&A	497	462	7.7%	376	32.4%
Operating income	5,770	4,707	22.6%	2,460	134.6%
EBITDA	7,156	5,889	21.5%	3,263	119.3%
EBIT	5,770	4,707	22.6%	2,460	134.6%
Financial expenses	787	709	11.1%	312	152.1%
- Interest Expenses	662	541	22.4%	270	145.0%
Dep. and amortization	1,386	1,181	17.4%	803	72.6%
Non-recurring items (*)					
Extraordinary items (*)					
PBT	5,330	4,272	24.8%	2,285	133.3%
PAT	4,638	3,773	22.9%	1,917	141.9%
(*) Adjusted PAT	4,638	3,773	22.9%	1,917	141.9%

Source: HPG, Rong Viet Securities

Exhibit 2: 4Q/2020 Performance Analysis

Particulars	4Q-FY20	3Q-FY20	+/- (qoq)	4Q-FY19	+/- (yoy)
Profitability Ratios (%)					
Gross Margin	24.3%	20.9%	337bps	15.8%	854bps
EBITDA Margin	27.8%	23.9%	391bps	18.2%	961bps
EBIT Margin	22.4%	19.1%	331bps	13.7%	870bps
Net Margin	18.0%	15.3%	271bps	10.7%	733bps
Adjusted Net Margin	18.0%	15.3%	271bps	10.7%	733bps
Turnover *(x)					
-Inventories	3.3	3.7	-0.4	3.2	0.1
-Receivables	17.2	19.6	-2.4	19.4	-2.1
-Payables	6.2	7.1	-0.9	7.7	-1.5
Leverage (%)					
Total Debt/ Equity	122.1%	113.6%	844bps	113.0%	907bps

Source: HPG, Rong Viet Securities. (*) annualized

Exhibit 3: 1Q/2021 Performance Forecast

Particulars (VND Bn)	1Q-FY21	+/-qoq	+/-yoy
Revenue	34,582	34%	80%
Gross profit	8,092	29%	115%
EBIT	7,316	27%	118%
NPAT	6,389	38%	180%

Source: Rong Viet Securities

- We expect revenue to increase by 80% YoY due to both higher selling volume and surging steel prices. HRC's selling volume will be roughly 670,000 tons, contributing 29% to HPG's total revenue. Meanwhile, we predict steel prices to increase by roughly 30% YoY.

- Gross margin is forecasted to expand from 19.6% in 1Q2020 to 22.4% in 1Q2021 because of the high profitability of the steel segment, which is supported by surging selling prices.

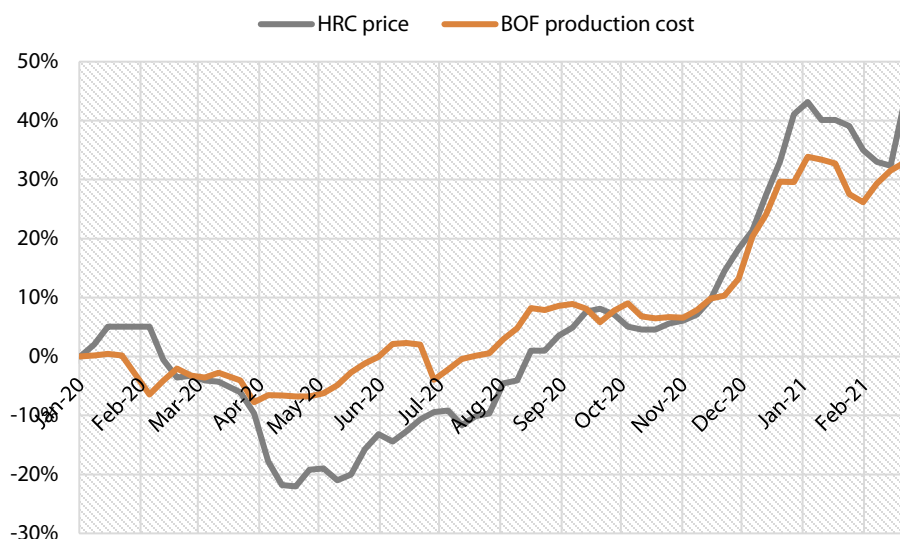
Update

Commodity prices have rallied globally.

HRC prices have risen by 10% from the beginning of 2021 due to the recovery in many regions, while iron ore supplies continue to stagnate in Brazil, and transportation costs become expensive. Car sales in China and India continued to rise, leading to increased demand for flat steel. On the contrary, iron ore supplies continue to be weak in Brazil due to the severe pandemic. This country still records an increasing number of COVID-19 cases. Iron ore supply-demand is relatively fragile as it depends on two countries, Australia, and Brazil. Hence, a drop in supply, such as the Vale dam disaster or the pandemic outbreak in Brazil, can lead to surging iron ore prices. Coupled with recovering steel demand, iron ore prices maintained a strong uptrend from 2H2020 and reached USD 170 per ton. Finally, the freight cost of some important sea routes has risen sharply, causing imported HRC prices in the domestic to increase strongly. For instance, steel freight from India to Vietnam has risen by USD 8-10 per ton to more than USD 45 per ton. Therefore, domestic HRC manufacturers can earn a higher gross margin due to their geographical positioning.

Increasing selling price and the strong demand for HRC will boost HPG's gross profit in the flat steel segment.

Figure 1: Changes in HRC price and BOF steelmaking costs



Source: Bloomberg, Rong Viet Securities

Due to a strong upward trend in HRC prices, we expect that HPG's gross profit margin will reach roughly 28% in 1H2021 and can decrease to about 23% in 2H. Because HPG usually stores enough raw materials to produce for the next 2-3 months, the increase in raw material prices will have a slow impact on the cost of its products. Meanwhile, HRC price has increased significantly compared to the BOF steelmaking cost (figure 1). We believe that the gross margin in the HRC steel segment will gradually stabilize at 22% - 23% as the supply and demand of HRC becomes more balanced by the end of the year.

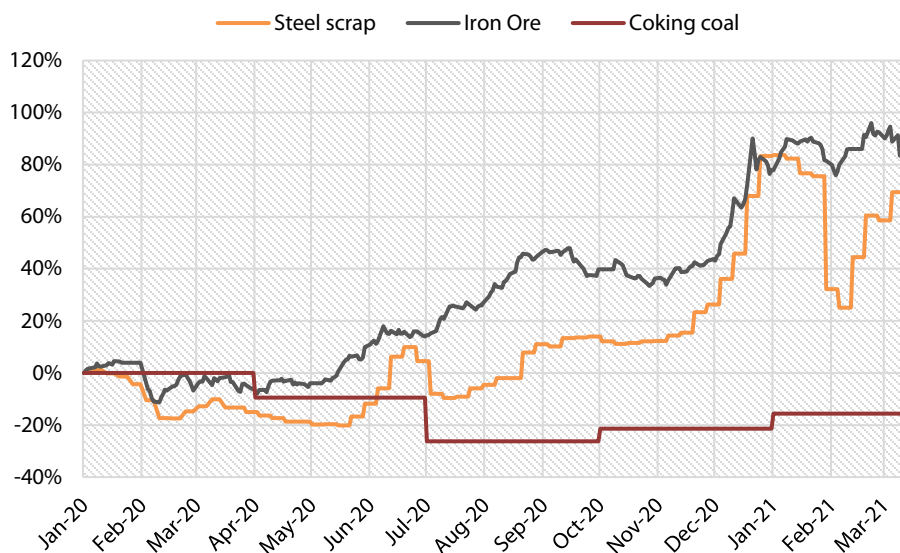
Regarding consumption, we think HPG will not face difficulties owing to both the high external demand and internal downstream capacity. The demand for domestic HRC from downstream manufacturers is strong in 2021 due to high orders from European and North American markets, which have strict rules of origin. Besides, HPG's coated steel pipe factories can consume roughly 1.4 million tons of HRC, equivalent to 47% of its HRC production volume this year. Therefore, we expect that HPG can sell roughly three million tons of HRC in 2021 (both internal and external), contributing to 31% of total revenue.

HPG's competitiveness in the construction steel segment is still strong, allowing the company to gain more market share in the South.

The sharp increase in steel scrap price has led the steel production cost using electric arc furnaces (EAF) to rise faster than using blast furnaces. Iron ore costs account for only 50% of BOF steelmaking costs, while steel scrap constitutes roughly 80% of EAF steelmaking costs.

Hence, although iron ore and steel scrap prices rise at a similar pace (figure 2), we estimate that EAF steelmaking cost was 20%-30% higher than BOF in the 4Q2020-1Q2021 period. Therefore, HPG has room to increase its selling price to support its gross margin and continue gaining market share.

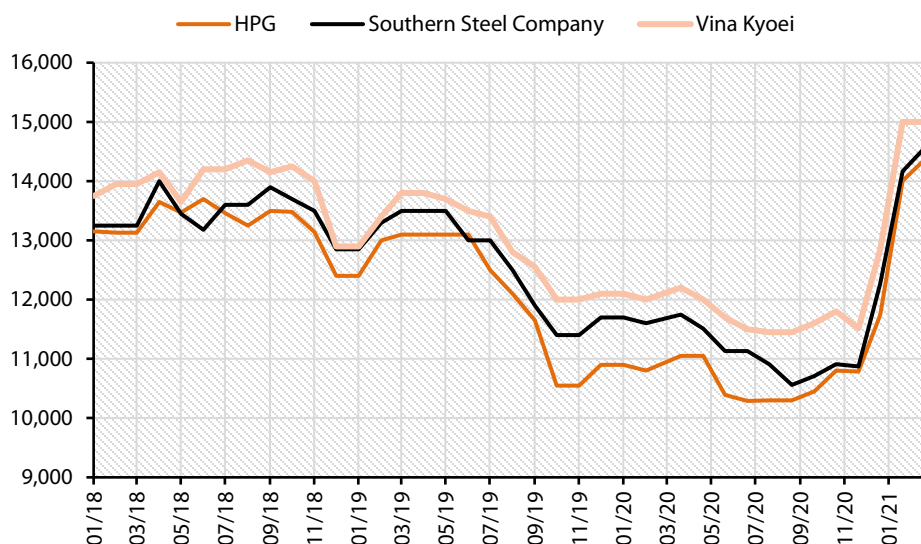
Figure 2: Change in material prices



Source: Bloomberg, Rong Viet Securities

We expect construction steel selling volume to recover from March onward, after two months affected by the pandemic and the Tet holiday. Infrastructure projects will play the main supportive role to stabilize the demand for construction steel. In addition, the company's steel prices are competitive in the Southern market, supporting its market share. HPG's steel price has often been 4%-10% lower than Vinakyoei's and 1%-7% lower than Pomina's. We forecast that the company's market share in the Southern market will increase from 23% to 27% in 2021, equivalent to roughly one million tons. Meanwhile, HPG's market share in the Northern and Central markets is likely to be stable. Export volume can grow by 10% owing to the higher demand in the construction sector to boost economies in overseas markets. For 2021, we expect the company to sell 3.8 million tons of finished construction steel, increasing by 10% YoY.

Figure 3: Construction steel prices in Southern Vietnam (VND/kg)



Source: HPG, Southern Steel Company and Vina Kyoei

Forecast

We expect HPG's revenue and NPAT to increase by roughly 60% and 70% respectively mainly because of the strong growth in HRC sales. Steel and agriculture will contribute roughly 90% and 8% of total revenue

We expect the HRC sub-segment to surpass the construction steel sub-segment in terms of gross profit, and boost steel pipe and coated steel sales. HPG will sell roughly 3.0 million tons of HRC (+330% YoY) and 3.8 million tons of construction volumes (+10% YoY). The shortage in the HRC market has been leading to the higher gross margin of HRC compared to construction steel (24% vs. 18%). HRC and construction steel can contribute VND 10,700 billion, and VND 8,300 billion to total gross profit, respectively. HPG has advantages to compete in the domestic market and export to developed markets. We forecast that HPG's coated steel and steel pipe sales will increase by 122% and 24% YoY to reach 400,000 tons and 1.0 million tons respectively in 2021.

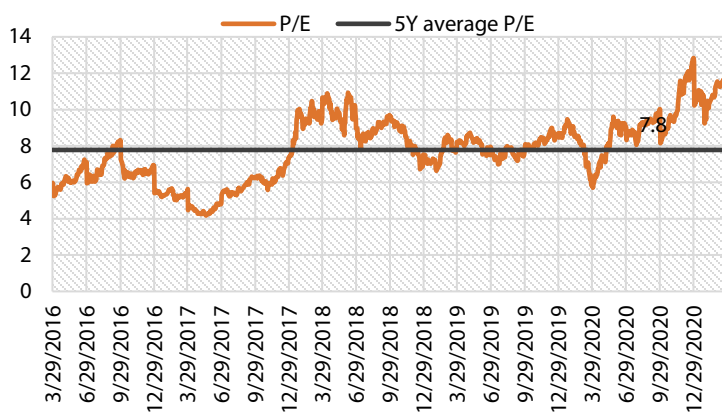
In the real estate segment, the company can increase its revenue by 60% YoY to VND 1,157 billion since monetizing its Pho Noi A Industrial Area project (92.5 ha) and Pho Noi Urban housing project. However, we forecast that the real estate segment will constitute only 1% of the company's revenue in 2021.

After a year of benefiting from surging hog prices, the agriculture segment's role in HPG's business will become minor. We forecast that pork and beef prices will decrease by 10% YoY in 2021, leading the gross margin in this segment to fall from 19.5% in 2020 to 15.3% in 2021. HPG is predicted to sell 440,000 hogs (+20% YoY), 167,000 cows (+12% YoY), 206 million eggs (+30% YoY), and 350,000 tons of animal feeds (+20% YoY) in 2021. Hence, the agriculture segment's revenue can increase by 10% YoY. We expect this segment's NPAT will be roughly VND 1,364 billion, equivalent to 6% of total net income in 2021 and lower than the portion of 12% in 2020.

Valuation

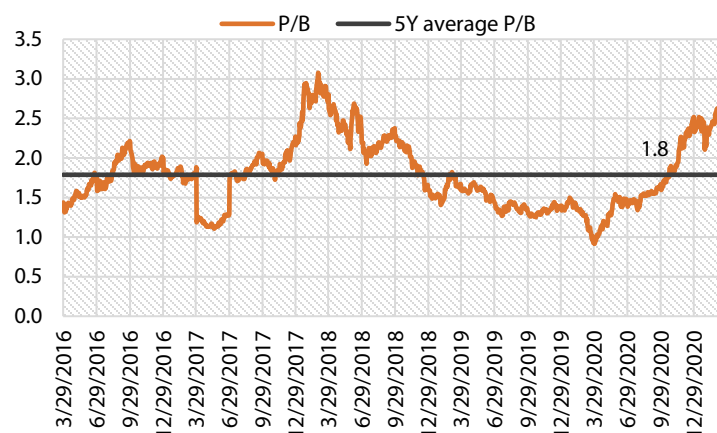
We use three methods to evaluate the stock, including FCFF, PE, and PB. In the FCFF method, we apply a WACC of 9.7% and exit EV/EBITDA of 6.7x. We apply a P/E ratio of 9.5x, equivalent to the peers' average. Besides, we think HPG's synergy has been larger as its value chain is becoming completed. Hence, we use a P/B ratio of 1.9x, which is higher than the industry's average of 1.0x and its 5-year average PB ratio of 1.8. Our fair value comes at **VND 55,200 value per share**, implying a **total return of 20%** as of the closing price on **March 31st, 2021**.

Figure 4: Historical P/E ratio



Source: Bloomberg, Rong Viet Securities

Figure 5: Historical P/B ratio



Source: Bloomberg, Rong Viet Securities

	VND Billion			
INCOME STATEMENT	2019	2020	2021E	2022F
Revenue	63,658	90,119	142,096	143,066
COGS	52,473	71,214	111,668	113,160
Gross profit	11,185	18,905	30,429	29,905
Selling expenses	873	1,094	1,895	1,868
G&A expenses	569	690	1,294	1,486
Financial income	471	991	747	654
Financial expenses	1,182	2,824	3,115	2,366
Other income/loss	66	66	66	66
Gain/(loss) from JVs	-1	2	2	2
PBT	9,097	15,355	24,939	24,907
Tax expense	1,518	1,849	1,854	1,894
Minority interests	71	67	71	74
PAT	7,508	13,439	23,014	22,938
EBIT	9,743	17,120	27,240	26,551

	%			
FINANCIAL RATIO	2019	2020	2021E	2022F
Growth (%)				
Revenue	14.0	41.6	57.7	0.7
Operating Income	-3.5	77.0	46.9	-2.3
EBITDA	-7.6	75.7	59.1	-2.5
PAT	-12.4	79.0	71.3	-0.3
Total Assets	29.5	29.2	6.4	1.8
Equity	17.6	24.1	31.0	19.3
Profitability (%)				
Gross margin	17.6	21.0	21.4	20.9
EBITDA margin	19.4	24.3	22.7	22.0
EBIT margin	15.3	19.0	19.2	18.6
Net margin	11.8	14.9	16.2	16.0
ROA	7.4	10.3	16.6	16.2
ROE	15.8	22.8	29.7	24.8
Efficiency				(times)
Receivable Turnover	17.8	14.7	11.4	12.5
Inventory Turnover	2.7	2.7	2.9	2.8
Payable Turnover	5.6	5.1	5.3	5.3
Liquidity				(times)
Current	1.2	1.1	1.5	2.0
Quick	0.4	0.6	0.6	0.9
Finance Structure (%)				
Total Debt/Equity	77.1	91.7	46.2	26.4
Current Debt/Equity	35.4	62.3	29.4	15.8
Long-term Debt/Equity	41.7	29.4	16.8	10.6

	VND Billion			
BALANCE SHEET	2019	2020	2021E	2022F
Cash and cash equivalents	4,565	13,001	4,688	7,052
Short-term investments	1,374	8,822	7,940	8,734
Accounts receivable	3,575	6,125	12,461	11,475
Inventories	19,412	26,287	38,945	40,031
Other current assets	1,546	2,566	3,079	3,694
Property, plant & equipment	68,242	71,201	68,867	67,104
Acquired intangible assets	331	297	282	269
Long-term investments	26	171	173	175
Other non-current assets	1,971	2,124	2,464	2,858
Total assets	101,041	130,593	138,899	141,392
Accounts payable	9,340	14,043	21,236	21,520
Short-term borrowings	16,838	36,798	22,735	14,619
Long-term borrowings	19,842	17,343	13,007	9,756
Other non-current liabilities	7,163	2,973	2,379	951
Bonus and Welfare fund	820	1,133	1,941	1,935
Technology-science, dev. fund	0	0	0	0
Total liabilities	54,003	72,292	61,298	48,781
Common stock and APIC	30,822	36,344	36,335	36,335
Treasury stock (enter as -)	0	0	0	0
Retained earnings	15,858	21,783	40,103	55,039
Other comprehensive income	1	6	6	6
Inv. and Dev. Fund	924	929	929	929
Total equity	47,605	59,062	77,372	92,308
Minority Interest	183	158	229	303

VALUATION RATIO	2019	2020	2021E	2022F
EPS (dong)	2,556	3,813	6,529	6,508
P/E (x)	8.6	6.6	7.0	7.0
BV (dong)	14,368	17,826	23,352	27,860
P/B (x)	1.4	2.3	1.9	1.6
DPS (dong/cp)	0	500	1,000	2,000
Dividend yield (%)	0.0	1.2	2.2	4.4

VALUATION MODEL	Price	Weight	Average
FCFF	58,000	40%	23,200
PE	62,100	30%	18,630
PB	44,400	30%	13,320

Target price **55,200**

VALUATION HISTORY	Price	Recommendation	Period
16/01/2020	33,400	BUY	Intermediate
13/03/2020	27,300	BUY	Intermediate
11/27/2020	33,600	NEUTRAL	Short-term
12/27/2020	46,200	BUY	Intermediate

RESULT UPDATE

This report is created for the purpose of providing investors with an insight into the discussed company that may assist them in the decision-making process. The report comprises analyses and projections that are based on the most up-to-date information with the objective that is to determine the reasonable value of the stock at the time such analyses are performed. Through this report, we strive to convey the complete assessment and opinions of the analyst relevant to the discussed company. To send us feedbacks and/or receive more information, investors may contact the assigned analyst or our client support department.

RATING GUIDANCE

Ratings	BUY	ACCUMULATE	REDUCE	SELL
Total Return including Dividends in 12-month horizon	>20%	5% to 20%	-20% to -5%	<-20%

ABOUT US

RongViet Securities Corporation (RongViet) was established in 2007, licensed to perform the complete range of securities services including brokerage, financial investment, underwriting, financial and investment advisory and securities depository. RongViet now has an operating network that spreads across the country. Our major shareholders, also our strategic partners, are reputable institutions, i.e Eximbank, Viet Dragon Fund Management, etc... Along with a team of the professional and dynamic staffs, RongViet has the man power as well as the financial capacity to bring our clients the most suitable and efficient products and services. Especially, RongViet was one of the very first securities firms to pay the adequate attention to the development of a team of analysts and the provision of useful research report to investors.

The **Analysis and Investment Advisory Department** of RongViet Securities provides research reports on the macro-economy, securities market and investment strategy along with industry and company reports and daily and weekly market reviews.

ANALYSIS & INVESTMENT ADVISORY DEPARTMENT
Lam Nguyen
Head of Research

lam.ntp@vdsc.com.vn
+ 84 28 6299 2006 (1313)

Trinh Nguyen
Senior manager

trinh.nh@vdsc.com.vn
+ 84 28 6299 2006 (1551)

- Energy
- Construction

Tung Do
Manager

tung.dt@vdsc.com.vn
+ 84 28 6299 2006 (1521)

- Retails
- F&B
- Aviation
- Logistics

Tam Pham
Manager

tam.ptt@vdsc.com.vn
+ 84 28 6299 2006 (1530)

- Textiles
- Fishery
- Fertilizer

Hoang Bui
Analyst

hoang.bh@vdsc.com.vn
+ 84 28 6299 2006 (1514)

- Automobile and spares
- Agriculture
- Industrial Park

Tu Pham
Analyst

tu.pm@vdsc.com.vn
+ 84 28 6299 2006 (1536)

- Steel
- Pharmaceutical

Thao Nguyen
Analyst

thao.nn@vdsc.com.vn
+ 84 28 6299 2006 (1524)

- Utilities

Kiet Tran
Analyst

kiet.tht@vdsc.com.vn
+ 84 28 6299 2006 (1528)

- Real Estate
- Market Strategy

Thanh Nguyen
Analyst

thanh.nn@vdsc.com.vn
+ 84 28 6299 2006 (1535)

- Banking

Ha My Tran
Senior Consultant

my.tth@vdsc.com.vn
+ 84 28 6299 2006

- Macroeconomics

Bernard Lapointe
Senior Consultant

bernard.lapointe@vdsc.com.vn
+ 84 28 6299 2006

Ha Tran
Assistant

ha.ttn@vdsc.com.vn
+ 84 28 6299 2006 (1526)

Vi Truong
Assistant

vi.ttt@vdsc.com.vn
+ 84 28 6299 2006 (1517)

DISCLAIMERS

This report is prepared in order to provide information and analysis to clients of Rong Viet Securities only. It is and should not be construed as an offer to sell or a solicitation of an offer to purchase any securities. No consideration has been given to the investment objectives, financial situation or particular needs of any specific. The readers should be aware that Rong Viet Securities may have a conflict of interest that can compromise the objectivity this research. This research is to be viewed by investors only as a source of reference when making investments. Investors are to take full responsibility of their own decisions. VDSC shall not be liable for any loss, damages, cost or expense incurring or arising from the use or reliance, either full or partial, of the information in this publication.

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

The information herein is compiled by or arrived at Rong Viet Securities from sources believed to be reliable. We, however, do not guarantee its accuracy or completeness. Opinions, estimations and projections expressed in this report are deemed valid up to the date of publication of this report and can be subject to change without notice.

This research report is copyrighted by Rong Viet Securities. All rights reserved. Therefore, copy, reproduction, republish or redistribution by any person or party for any purpose is strictly prohibited without the written permission of VDSC. Copyright 2021 Viet Dragon Securities Corporation.

IMPORTANT DISCLOSURES FOR U.S. PERSONS

This research report was prepared by Viet Dragon Securities Corp. ("VDSC"), a company authorized to engage in securities activities in Vietnam. VDSC is not a registered broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to "major U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act").

Additional Disclosures

This research report is for distribution only under such circumstances as may be permitted by applicable law. This research report has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient, even if sent only to a single recipient. This research report is not guaranteed to be a complete statement or summary of any securities, markets, reports or developments referred to in this research report. Neither VDSC nor any of its directors, officers, employees or agents shall have any liability, however arising, for any error, inaccuracy or incompleteness of fact or opinion in this research report or lack of care in this research report's preparation or publication, or any losses or damages which may arise from the use of this research report.

VDSC may rely on information barriers, such as "Chinese Walls" to control the flow of information within the areas, units, divisions, groups, or affiliates of VDSC. Investing in any non-U.S. securities or related financial instruments (including ADRs) discussed in this research report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the U.S. Securities and Exchange Commission. Information on such non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect within the United States.

The value of any investment or income from any securities or related financial instruments discussed in this research report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments.

Past performance is not necessarily a guide to future performance and no representation or warranty, express or implied, is made by VDSC with respect to future performance. Income from investments may fluctuate. The price or value of the investments to which this research report relates, either directly or indirectly, may fall or rise against the interest of investors. Any recommendation or opinion contained in this research report may become outdated as a consequence of changes in the environment in which the issuer of the securities under analysis operates, in addition to changes in the estimates and forecasts, assumptions and valuation methodology used herein.

No part of the content of this research report may be copied, forwarded or duplicated in any form or by any means without the prior.

RESEARCH DISCLOSURES

Third Party Research

This is third party research. It was prepared by Rong Viet Securities Corporation (Rong Viet), with headquarters in Ho Chi Minh City, Vietnam. Rong Viet is authorized to engage in securities activities according to its domestic legislation. This research is not a product of Tellimer Markets, Inc., a U.S. registered broker-dealer. Rong Viet has sole control over the contents of this research report. Tellimer Markets, Inc. does not exercise any control over the contents of, or the views expressed in, research reports prepared by Rong Viet.

Rong Viet is not registered as a broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to "major U.S. institutional investors" and other "U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act").

Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through Tellimer Markets, Inc., located at 575 Fifth Avenue, 27th Floor, New York, NY 10017. A representative of Tellimer Markets, Inc. is contactable on +1 (212) 551 3480. Under no circumstances should any U.S. recipient of this research report effect any transaction to buy or sell securities or related financial instruments through Rong Viet. Tellimer Markets, Inc. accepts responsibility for the contents of this research report, subject to the terms set out below, to the extent that it is delivered to a U.S. person other than a major U.S. institutional investor.

None of the materials provided in this report may be used, reproduced, or transmitted, in any form or by any means, electronic or mechanical, including recording or the use of any information storage and retrieval system, without written permission from.

Rong Viet is the employer of the research analyst(s) responsible for the content of this report and research analysts preparing this report are resident outside the U.S. and are not associated persons of any U.S. regulated broker-dealer. The analyst whose name appears in this research report is not registered

or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA") and may not be an associated person of Tellimer Markets, Inc. and, therefore, may not be subject to applicable restrictions under FINRA Rules on communications with a subject company, public appearances and trading securities held by a research analyst account.

Tellimer Markets, Inc. or its affiliates has not managed or co-managed a public offering of securities for the subject company in the past 12 months, has not received compensation for investment banking services from the subject company in the past 12 months, and does not expect to receive or intend to seek compensation for investment banking services from the subject company in the next three months. Tellimer Markets, Inc. has never owned any class of equity securities of the subject company. There are no other actual, or potential, material conflicts of interest of Tellimer Markets, Inc. at the time of the publication of this report. As of the publication of this report, Tellimer Markets, Inc. does not make a market in the subject securities.

About Tellimer

Tellimer is a registered trade mark of Exotix Partners LLP. Exotix Partners LLP and its subsidiaries ("Tellimer") provide specialist investment banking services to trading professionals in the wholesale markets. Tellimer draws together liquidity and matches buyers and sellers so that deals can be executed by its customers. Tellimer may at any time, hold a trading position in the securities and financial instruments discussed in this report. Tellimer has procedures in place to identify and manage any potential conflicts of interests that arise in connection with its research. A copy of Tellimer's conflict of interest policy is available at www.tellimer.com/regulatory-information.

Distribution

This report is not intended for distribution to the public and may not be reproduced, redistributed or published, in whole or in part, for any purpose without the written permission of Tellimer. Tellimer shall accept no liability whatsoever for the actions of third parties in this respect. This report is for distribution only under such circumstances as may be permitted by applicable law.

This report may not be used to create any financial instruments or products or any indices. Neither Tellimer, nor its members, directors, representatives, or employees accept any liability for any direct or consequential loss or damage arising out of the use of all or any part of the information herein.

United Kingdom: Distributed by Exotix Partners LLP only to Eligible Counterparties or Professional Clients (as defined in the FCA Handbook). The information herein does not apply to, and should not be relied upon by, Retail Clients (as defined in the FCA Handbook); neither the FCA's protection rules nor compensation scheme may be applied.

UAE: Distributed in the Dubai International Financial Centre by Exotix Partners LLP (Dubai) which is regulated by the Dubai Financial Services Authority ("DFSA"). Material is intended only for persons who meet the criteria for Professional Clients under the Rules of the DFSA and no other person should act upon it.

Other distribution: The distribution of this report in other jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe, any such restriction.

Disclaimers

Tellimer and/or its members, directors or employees may have interests, or long or short positions, and may at any time make purchases or sales as a principal or agent of the securities referred to herein. Tellimer may rely on information barriers, such as "Chinese Walls" to control the flow of information within the areas, units, divisions, groups of Tellimer.

Investing in any non-U.S. securities or related financial instruments (including ADRs) discussed in this report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the U.S. Securities and Exchange Commission. Information on such non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect within the United States. The value of any investment or income from any securities or related financial instruments discussed in this report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments.

Frontier and Emerging Market laws and regulations governing investments in securities markets may not be sufficiently developed or may be subject to inconsistent or arbitrary interpretation or application. Frontier and Emerging Market securities are often not issued in physical form and registration of ownership may not be subject to a centralised system. Registration of ownership of certain types of securities may not be subject to standardized procedures and may even be effected on an ad hoc basis. The value of investments in Frontier and Emerging Market securities may also be affected by fluctuations in available currency rates and exchange control regulations. Not all of these or other risks associated with the relevant company, market or instrument which are the subject matter of the report are necessarily considered.