FPT Corporation (HSX: FPT)

Maintains high growth

Particulars (VND B)	1Q-FY19	4Q-FY18	+/- QoQ	1Q-FY18	+/-yoy
Net revenue	6,826	5,666	20%	5,474	25%
PAT	792	626	26%	594	33%
EBIT	1,080	810	33%	719	50%
EBIT margin	15.8%	14.3%	153bps	13.1%	269bps

Source: FPT, Rong Viet Securities

2Q 2019 results: Maintains consistent growth

- All business segments recorded healthy growth YoY. Revenue and EBT growth of the technology segment reached 28% and 44% while telecommunications reached 17% and 13%.
- Software outsourcing grew strongly with revenues increasing by 25%, of which the US increased 86% thanks to Intellinet consolidation.
- Telecommunication is growing steadily due to increasing broadband internet and PayTV subscribers.
- Education & Investment segment increased its EBT by 47%, accounting for 13% of total EBT.

2019 forecast:

- Technology segment: continue to sign more synergistic contracts with Intellinet in the US, estimating contract value for this year at USD 4-5 mn. Looking for M&A targets in other new markets.
- Continuing to grow PayTV subscribers.
- Strong financial condition allows FPT to maintain a cash dividend of VND 2,000 / share, equivalent to a 40% payout ratio while increasing reinvestment to maintain high growth.

Valuation and recommendation:

FPT is trading at a trailing P/ E of 12.5x. We believe this is a low valuation considering the ability to maintain a CAGR of approximately 20% over the next five years. The main growth driver will come from software outsourcing. The contribution from the education sector will also drive earnings.

FPT's profit growth always fluctuated widely due to the impact of the Retail & Trading and Information Systems segments. The company has recently divested from Retail & Trading, while the proportion of Information System has become insignificant. Therefore, with the increase in the contribution from Software outsourcing and Education, we believe that the growth quality of FPT in general will be more sustainable.

*On the other hand, foreign room has always been a factor hindering the stock price. FPT could possibly be included in the VN-Diamond Index or the future approval of "non-voting depository receipt" (NVDR) can solve this issue. We maintain our **BUY** recommendation for FPT, with a target price of **VND 68,000 per share** over the next 12 months, equivalent to a forward P/E of 13x.*

BUY +25%

CMP (VND)	56,000
Target price (VND)	68,000
Cash dividend (VND)*	2,000

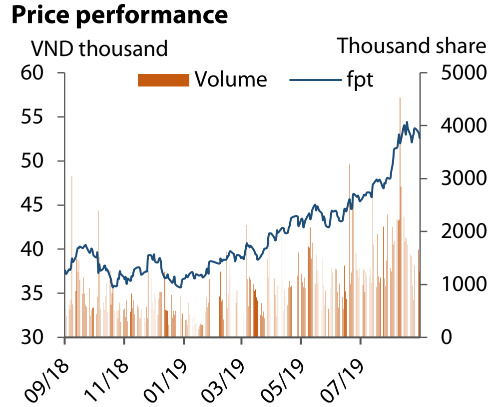
** Expected in the next 12 months*

Stock info

Sector	Technology
Market Cap (VND billion)	35,324
Current Shares O/S	672
Avg. Daily Volume (in 20 sessions)	1,851,081
Free float (%)	80.0
52 weeks High	54,400
52 weeks Low	35,660
Beta	0.89

	FY2018	Current
EPS	4,270	4,333
EPS growth (%)	-10.0	+12.0
Adjusted EPS	3,871	4,333
P/E	10.0	12.14
P/B	1.75	2.23
EV/EBITDA	8.24	8.73
Cash dividend	4.7	3.8
ROE (%)	18.71	19.44

Price performance



Major Shareholders (%)

Truong Gia Binh (chairman)	7.01
SCIC	5.90
Red River Holding	4.51
Foreign limit room (%)	49.0

Son Tran

(084) 028- 6299 2006 – Ext 1527

son.tt@vdsc.com.vn

Exhibit 1: 2Q 2019 results

Particulars (VND B)	Q2-FY19	Q1-FY19	+/-(qoq)	Q2-FY18	+/-(yoy)
Net revenue	6,826	5,666	20.5%	5,474	24.7%
Gross profit	2,578	2,279	13.1%	2,001	28.9%
SG&A	-365	-492	-25.8%	-378	-3.4%
Operating income	2,943	2,771	6.2%	2,378	23.7%
EBITDA	1,413	1,129	25.2%	1,005	40.6%
EBIT	1,080	810	33.4%	719	50.3%
Financial expenses	204	121	68.4%	70	191.7%
- Interest Expenses	72	73	-0.4%	55	31.4%
Dep. and amortization					
Non-recurring items (*)					
Extraordinary items (*)					
PBT	1.179	960	22.7%	906	30.0%
PAT	792	626	26.4%	594	33.2%
(*) Adjusted PAT	792	626	26.4%	594	33.2%

Source: FPT, Rong Viet Securities

Exhibit 2: 2Q 2019 performance analysis

Particulars	1Q-FY19	4Q-FY18	+/-(qoq)	1Q-FY18	+/-(yoy)
Profitability ratios (%)					
Gross margin	37.8	40.2	-246bps	36.5	122bps
EBITDA margin	20.7	19.9	79bps	18.4	235bps
EBIT margin	15.8	14.3	153bps	13.1	269bps
Net margin	11.6	11.1	55bps	10.9	74bps
Adjusted net margin					
Turnover (x)					
-Inventories	11	10	1.8	11	0.1
-Receivables	4.4	3.7	0.7	3.9	0.5
-Payables	3	2	0.7	3	0.2
Leverage (%)					
Total debt/ equity	89.3	81.8	749bps	85.7	360bps

Source: FPT, Rong Viet Securities

Exhibit 3: 3Q 2019 performance forecast

Particulars (VND B)	2Q-FY19	+/- qoq	+/- yoy
Revenue	7,436	9%	23%
Gross profit	2,888	12%	26%
EBIT	1,211	12%	37%
NPAT	904	14%	25%

Source: Rong Viet Securities.

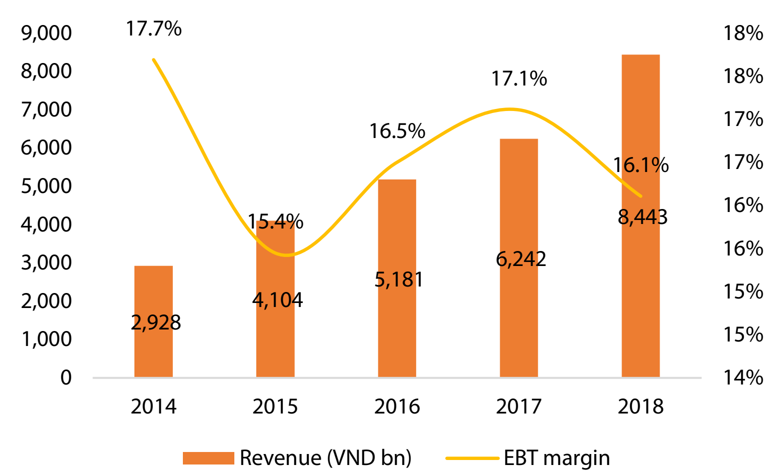
Update

Software outsourcing grew strongly with revenue and EBT increasing by 37.8% and 39.5% YoY respectively in 1H2019. In general, all major markets had good growth: Japan + 26%, Europe + 33%, Asia - Pacific + 29%, notably the US market with 86% revenue growth.

Contributing to the revenue growth of the US, there was 37% from the consolidated results of Intellinet, 30% from the own growth of FPT Software and 19% from the work that Intellinet brought. The M&A of Intellinet enhances FPT's capacity in providing all-in-one contracts, from implementation to consulting. It is estimated that FPT Software's revenue from Intellinet current clients this year will be about USD 4-5 mn. The potential of FPT from providing implementation services for about 200 existing customers of Intellinet as well as Intellinet providing consulting services to existing customers of FPT Software is abundant.

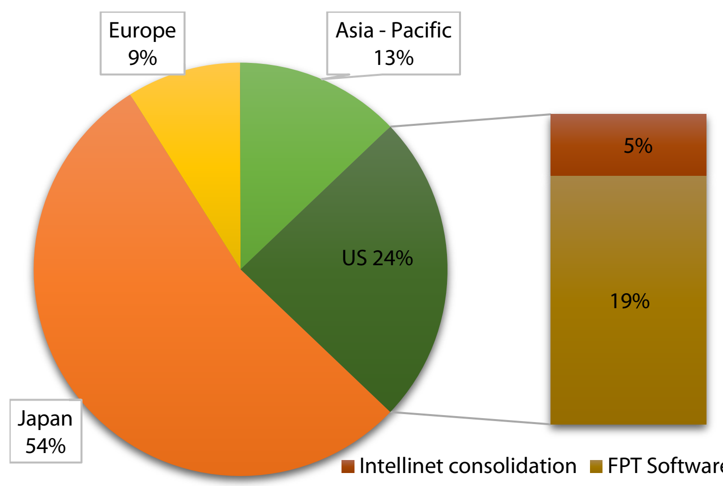
Compared to Japan, the US, Europe and Middle East markets are much different for Vietnamese software companies. In order to expand in these markets, FPT pursues an M&A strategy to acquire local companies, most notably the acquisition of RWE IT Slovakia in Europe (2014) and Intellinet in the US (2018). Similar to these deals, FPT's M&A targets are consulting companies to create synergies with FPT Software's implementation services.

Figure 1: FPT's software outsourcing segment – *2018's net margin was affected by one-off expense of Intellinet M&A*



Source: FPT

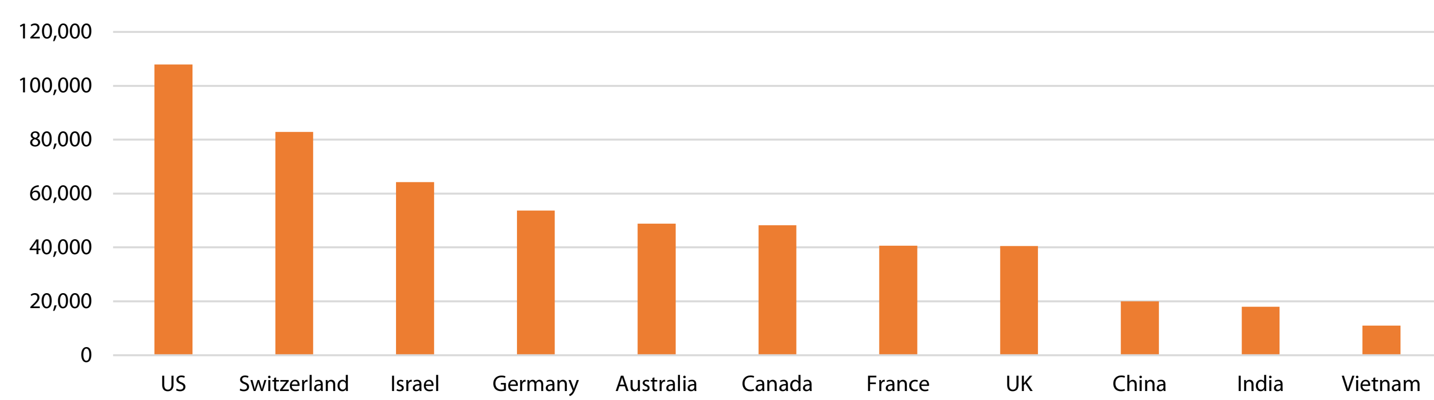
Figure 2: Contribution to software outsourcing revenue by market (6M 2019)– *Japan is still the most important market while the US is growing rapidly, especially after the Intellinet M&A*



Source: FPT

Beside experience and prestige from contracts with companies in the Fortune 500, cheap labor is one advantage for FPT in comparison with other competitors, mostly from India and China.

Figure 3: Software engineer salaries (USD thousand/year)



Sources: daxx.com, Rong Viet Securities

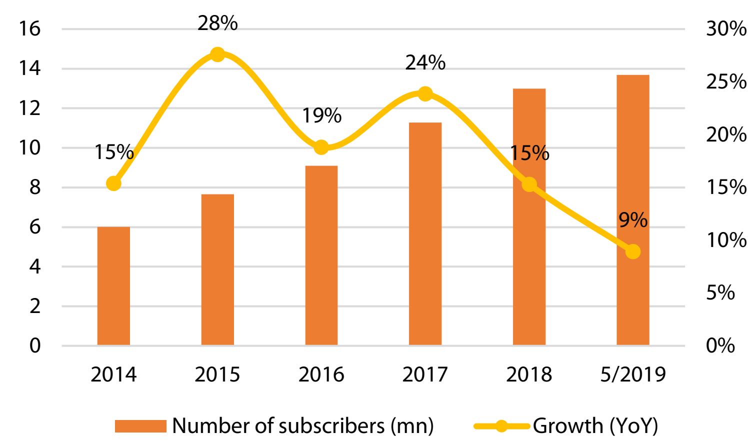
Risks for the technology sector: According to an HfS Research forecast, jobs in the Indian IT industry will decrease by 14% in the period of 2017-2021 because many outsourcing companies cannot keep up with the increasing needs of customers for new technologies such as cloud computing, AI, IoT ... while increasing salaries reduce competitiveness. This outlines that the outsourcing model based on cheap labor of the "technology worker" intensive model will not be sustainable in the long term. Therefore, we appreciate FPT's strategy to transform itself through M&A of foreign consulting companies and investment in subsidiaries in new fields (IoT, blockchain).

Telecommunication segment increased by 18% and 15% in revenue and EBT. Broadband Internet contributed 63% of the segment's revenue and increased 14% yoy.

- **The broadband Internet market** in Vietnam has now stabilized with organic growth forecast at less than 5% / year for 2019 (according to BMI). According to data from the Viet Nam Telecommunications Authority, by the end of May 2019, there were 13.7 million broadband subscribers, accounting for about 55% of total households. The potential growth of new subscribers from households who have not accessed the internet, mainly in rural areas, is still abundant. This will be the main driver for revenue growth of FPT Telecom. FPT's broadband Internet is currently covering about 60% of Vietnam geographically.

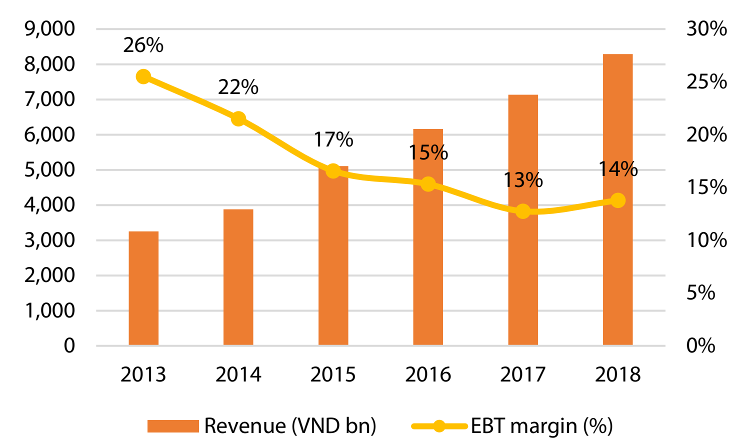
In addition, we expect that cost per subscriber will increase because the uncovered provinces mostly have low population density and underdeveloped infrastructure, leading to high CAPEX. Along with that is the pressure from mobile internet with the development of 4G networks and lower fees. This could lead to intense competition between various providers putting pressure on margins. This is reflected in the downtrend of FPT's telecommunications services margins.

Figure 4: Broadband internet subscriber growth in Vietnam



Source: Viet Nam Telecommunications Authority

Figure 5: Revenue and EBT margin of FPT's telecom services



Source: FPT

-**Pay TV:** the new business of FPT. Regarding the overall market, the total number of subscribers reached 15.3 million, up 5.5% compared to 2018 but the industry is facing fierce competition. There are 36 companies providing paid TV services nationwide, of which 20 provide Internet TV. The market is crowded, causing domestic providers to compete by lowering subscription prices. Along with that, copyright fees are increasing and the pressure from international Internet TV services such as YouTube, Netflix, Iflix push margins lower.

Therefore, even though PayTV can take advantage of FPT's internet infrastructure, we do not think it can become an important driver of FPT Telecom, given the local market is not too promising.

- In June 2018, The Ministry of Finance reduced the required contribution to the public telecommunication service fund from 1.5% to 0.7% of total revenue. Accordingly, FPT can save an amount equivalent to 0.8% of revenue from Internet services. The new adjustment only applied from 2H2018 onwards and is estimated to help improve net profit margin of the internet segment by VND 30 bn in 2019, equivalent to 2% of Telecom segment's EBT.

We believe that improving efficiency of Pay TV and the reduction in contribution to the public telecommunication service fund will offset the increased costs of internet expansion to remote regions. From there, the telecom segment is projected to have a revenue growth of 17% and EBT of 15% for 2019.

Other businesses

Education – investment's revenue increased by 5% YoY, EBT grew by 47%. According to 2018 data, the enrollment rate of FPT education increased 55% and the number of students increased 48% compared to 2017, reaching a total of 36,600 students of which 93% were at the undergraduate level.

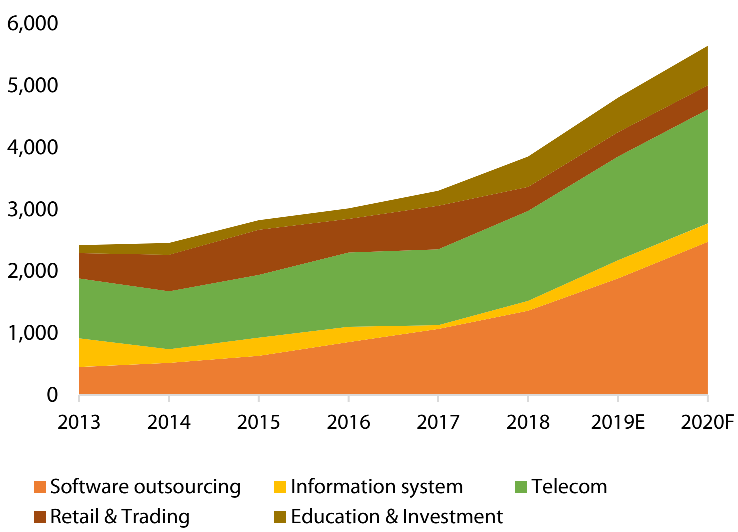
According to VietnamWorks (2018), Vietnam will face a deficit of about 78,000 IT engineers by 2020. The company has 16,000 software engineers and aims to increase this to 27,000 by 2021 to meet future demand. To maintain its competitiveness and reduce turnover, training new human resources for the company is one of the main goals of FPT Education. In the coming years, FPT will expand its campus in Hanoi, Ho Chi Minh City, Da Nang and Can Tho, as well as open new ones in Quang Nam and Binh Dinh.

EBT from joint-ventures FPT Retail and FPT Trading increased by 4%, of which FPT Trading decreased by 5% and Retail increased by 10%. 2019 continues to be a difficult year for distribution & retail activities since the phone market is saturated. The slowdown in phone installment / price subsidy programs in 6M 2019, along with the fact that iPhone launched in late 2018 were not too successful, are factors limitating the growth of this segment.

Financial analysis

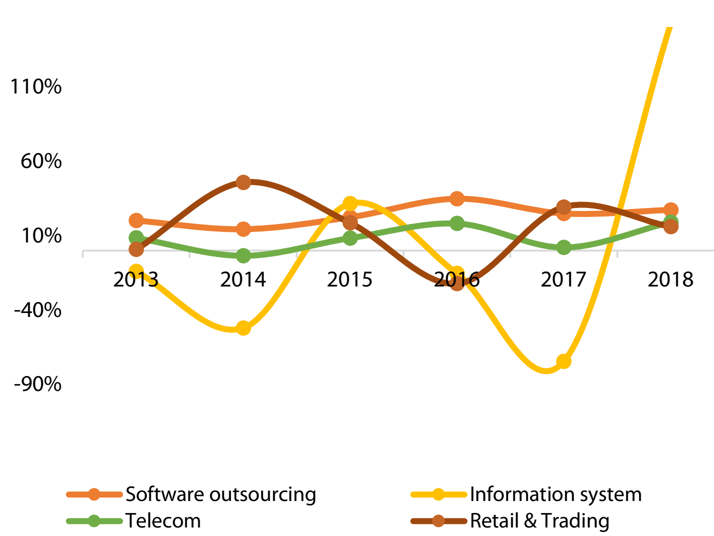
FPT's profit growth always fluctuated widely due to the impact of the Retail & Trading and Information Systems segments. The company has recently divested from Retail & Trading, while the proportion of Information System has become insignificant. Therefore, with the increase in the contribution from Software outsourcing and Education, we believe that the growth quality of FPT in general will be more sustainable.

Figure 6: Contribution to EBT by segments



Sources: FPT, Rong Viet Securities

Figure 7: EBT growth by segments



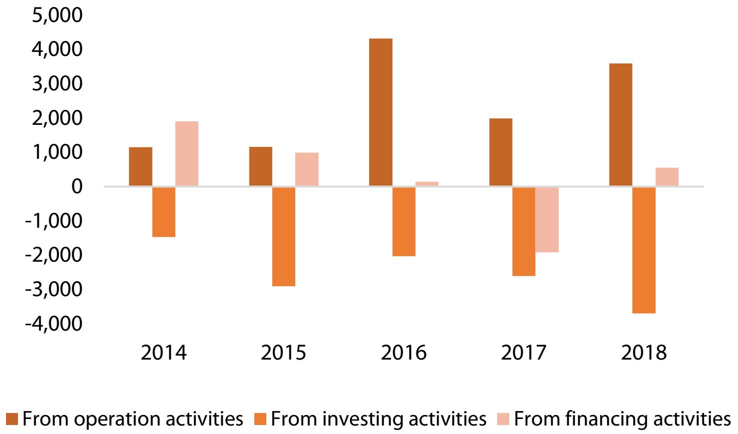
Source: FPT

After the divestment, FPT's financial health has become healthier. The debt/equity ratio decreased from 1.6 (2016) to 0.9 and 1.0 respectively in 2017 and 2018, in which short-term debt dropped sharply from VND 9,200 bn (2016) to VND 4,100 bn (2017), mainly from reducing loans to finance the needs of retail & trading. As a result, the average interest expense for the period of 2018-2020 is expected to decrease to VND 400 bn / year compared to the average of VND 640 bn / year for the period of 2015-2017.

CAPEX for 2019 is expected to be VND 4,669 bn. Despite being a growth engine of FPT, CAPEX for the technology sector is not that high (only 22% of total CAPEX plan), due to a significant part of these investments going into labor costs (for example, training staffs and recruitment of experts from different fields) which are recorded as operating costs. Most of CAPEX is for the Telecommunications sector (64%) to develop internet infrastructure and invest in building data centers. In prior years, actual CAPEX was usually lower than the plan.

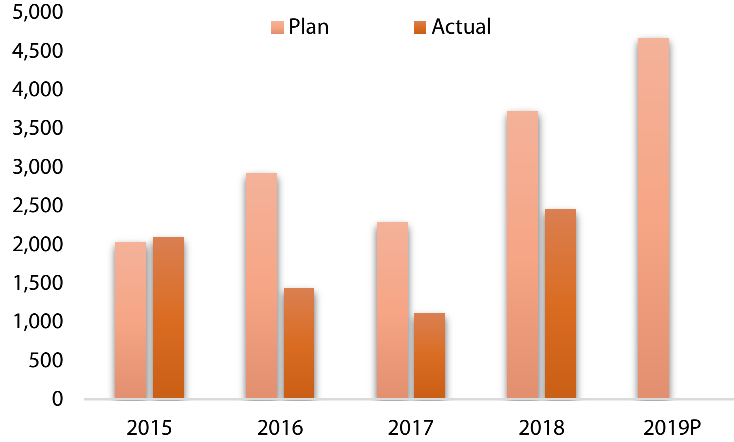
The company still maintains a high dividend payout ratio, estimated at 40% for 2019.

Figure 8: FPT cash flow (VND bn)



Source: FPT financial statement

Figure 9: FPT's CAPEX (VND bn)



Source: FPT annual report

VND in billions

Income statement	FY2017	FY2018	FY2019F	FY2020F
Revenue	42,659	23,214	28,598	33,167
COGS	32,976	14,490	17,623	20,433
Gross profit	9,682	8,723	10,975	12,734
Selling expense	3,075	2,048	2,431	2,819
G&A expense	3,441	3,559	4,290	4,975
Finance income	1,583	607	521	699
Finance expense	601	368	422	443
Other profits	35	58	58	58
PBT	4,255	3,852	4,804	5,685
Prov. of tax	727	624	686	817
Minority's interest	597	614	798	875
PAT to equity S/H	2,932	2,615	3,319	3,992
EBIT	3,167	3,117	4,254	4,940

%

Financial ratio	FY2017	FY2018	FY2019F	FY2020F
Growth (%)				
Revenue	7.9%	-45.6%	23.2%	16.0%
Operating income	5.6%	1.8%	28.8%	13.9%
EBITDA	3.9%	-1.6%	36.5%	16.1%
PAT	47.3%	-10.8%	26.9%	20.3%
Total assets	-16.2%	18.9%	4.2%	12.2%
Equity	20.0%	9.0%	21.6%	17.3%
Profitability (%)				
Gross margin	22.7%	37.6%	38.4%	38.4%
EBITDA margin	9.9%	18.4%	19.3%	18.9%
EBIT margin	7.4%	13.4%	14.9%	14.9%
Net margin	6.9%	11.3%	11.6%	12.0%
ROA	11.7%	8.8%	10.7%	11.5%
ROE	25.7%	21.0%	21.9%	22.5%
Efficiency (x)				
Receivable turnover	6.9	3.6	5.0	5.0
Inventory turnover	32.3	10.8	12.3	12.3
Payable turnover	4.9	2.0	3.3	3.3
Liquidity (x)				
Current	1.5	1.3	1.7	2.0
Quick	1.4	1.2	1.6	1.9
Solvency (%)				
Total debt/equity	41.0%	55.9%	46.2%	39.0%
Current debt/equity	36.0%	53.0%	41.4%	33.6%
Long-term Debt/equity	4.9%	2.9%	4.7%	5.4%

VND in billions

Balance sheet	FY2017	FY2018	FY2019F	FY2020F
Cash and cash equivalents	3,481	3,926	5,832	8,453
Short-term investments	4,379	5,568	5,846	6,139
Accounts receivable	6,152	6,424	5,720	6,633
Inventories	1,020	1,341	1,436	1,665
Other current assets	1,028	1,114	1,226	1,348
Property, plant & equipment	5,395	6,385	5,723	5,009
Acquired intangible assets	658	1,630	1,531	1,405
Long-term investments	1,783	2,202	2,595	3,026
Other non-current assets	1,104	1,136	1,079	1,100
Total assets	**25,000**	**29,726**	**30,987**	**34,778**
Accounts payable	6,669	7,377	5,287	6,130
Short-term borrowings	4,117	6,603	6,273	5,959
Long-term borrowings	565	367	717	967
Other non-current liabilities	96	164	180	198
Bonus and welfare fund	314	452	574	690
Technology-science, dev. fund	0	0	0	0
Total liabilities	**11,761**	**14,963**	**13,031**	**13,945**
Common stock and APIC	5,359	6,186	6,804	6,804
Treasury stock (enter as -)	-1	-1	-1	-1
Retained earnings	5,511	5,290	7,358	9,973
Other comprehensive income	385	760	760	760
Inv. and dev. fund	171	224	224	224
Total equity	**11,426**	**12,458**	**15,145**	**17,760**
Minority interest	1,809	2,302	2,810	3,073

Valuation ratio	FY2017	FY2018	FY2019F	FY2020F
EPS (VND)	4,340	3,871	4,894	5,887
P/E (x)	10.3	9.9	11.4	9.5
BV (VND)	21,520	20,306	22,424	26,296
P/B (x)	2.3	1.8	2.5	2.1
DPS (VND/cp)	2,500	2,000	2,000	2,000
Dividend yield	4.4	4.7	3.6	3.6

Valuation model	*Price*	*Weight*	*Average*
FCFF	67,500	50%	33,500
P/E	69,000	50%	34,500
Target price (VND)			**68,000**

Valuation history	*Price*	*Recommendation*	*Period*
09/2019	68,000	Buy	Long term
08/2018	50,900	Buy	Long term
11/2017	54,700	Buy	Long term
05/2017	46,300	Buy	Long term
03/2017	41,800	Buy	Long term
09/2016	37,200	Buy	Long term

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
Deputy Manager
lam.ntp@vdsc.com.vn
+ 84 28 6299 2006 (1313)
- Banking
- Market Strategy

Duong Lai
Senior Analyst
duong.ld@vdsc.com.vn
+ 84 28 6299 2006 (1522)
- Real Estate
- Building Materials

Vu Tran
Senior Analyst
vu.thx@vdsc.com.vn
+ 84 28 6299 2006 (1518)
- Oil & Gas
- Fertilizer

Trinh Nguyen
Senior Analyst
trinh.nh@vdsc.com.vn
+ 84 28 6299 2006 (1551)
- Steel
- Construction

Tu Vu
Analyst
tu.va@vdsc.com.vn
+ 84 28 6299 2006 (1511)
- Macroeconomics

Son Tran
Analyst
son.tt@vdsc.com.vn
+ 84 28 6299 2006 (1527)
- Market Strategy
- Consumer discretionary
- Pharmaceuticals

Tung Do
Analyst
tung.dt@vdsc.com.vn
+ 84 28 6299 2006 (1521)
- Logistics
- Aviation

Thu Pham
Analyst
thu.pa@vdsc.com.vn
+ 84 28 6299 2006 (1520)
- Industrial Real Estate
- Infrastructure & BOT

Thao Dang
Analyst
thao.dtp@vdsc.com.vn
+ 84 28 6299 2006 (1529)
- Food & Beverage
- Textiles

Tam Pham
Analyst
tam.ptt@vdsc.com.vn
+ 84 28 6299 2006 (1530)
- Insurance
- Fishery

Anh Nguyen
Analyst
anh2.ntt@vdsc.com.vn
+ 84 28 6299 2006 (1531)
- Banking

Vy Nguyen
Analyst
vy.ntk@vdsc.com.vn
+ 84 28 6299 2006 (1528)
- Automobile & Parts

Hoang Nguyen
Analyst
hoang.nt@vdsc.com.vn
+ 84 28 6299 2006 (1538)
- Market Strategy

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.

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 Floor 36, 444 Madison Avenue, Floor 36, New York, NY 10022. 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 standardised 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.