



VIETNAM GERMANY STEEL PIPE JSC (HNX:VGS)

Strongly Underpriced

- The steel industry is forecasted to continue to grow in 2018
- VGS has strong advantages: future sales and output growth
- Valuations are attractive compared to industry peers
- The residential project in Vinh Phuc is a potential catalyst

Outlook and Recommendation:

Vietnam Germany Steel Pipe JSC (HNX:VGS) was established as one of the leading steel companies in northern Vietnam under the brand name "Thép Viet Duc" for both construction steel and steel pipe products. VGS produces a variety of steel pipes used for construction purposes and interior usages. Viet Germany Steel Pipe had a 9.3% market share in the North in 2017, which shows its power as a large local steel maker. As a common steel brand name locally, VGS benefits from the growth in demand in the region. Numerous new projects will be underway in the near future in both the public and private sectors.

VGS is in a healthy financial position with no long-term debt. It pays a consistent cash dividend. VGS plans to pay up to VND 1,200 per share for both 2017 and 2018, equal to a dividend yield of 10.9% at current market price. We believe VGS is currently undervalued because of its accounting method that quickly depreciates machinery over two years, which means a feasible large improvement in gross profit in 2018 and 2019 is possible. The residential project in Vinh Phuc will be a catalyst for its stock price, as we evaluate its NPV at VND 89 billion.

*Using FCFE, P/E and P/B valuation methods, we believe VGS should be worth VND 15,500 per share, equivalent to a **38% upside** and recommend a **BUY** on the stock. By taking into account the residential project's value, VGS share could reach VND 17,800, which means a 59% upside.*

Key financials

End year (VND bn)	FY2015	FY2016	FY2017	FY2018E	FY2019F
Net revenues	3,428	4,551	5,980	7,651	7,895
% growth	26%	33%	31%	27.9%	3.2%
PAT	46	82	71	98	108
% growth	115%	78%	-12.4%	37.8%	9.4%
Net profit margin (%)	1.3%	1.8%	1.2%	1.3%	1.4%
ROA (%)	4.2%	5.4%	4.1%	4.9%	5.3%
ROE (%)	8.7%	14.0%	12.1%	15.7%	16.0%
EPS (VND)	1,221	2,168	1,900	2,226	2,434
Adjusted EPS (VND)	1,038	1,843	1,615	2,226	2,434
BV (VND)	14,076	15,522	15,666	16,691	17,925
Cash dividend (VND)	250	1,000	1,500	1,200	1,200
P/E (x)	3.5	4.3	4.8	4.9	4.5
P/BV (x)	0.3	0.6	0.6	0.7	0.6

Source: VGS, RongViet Securities

BUY

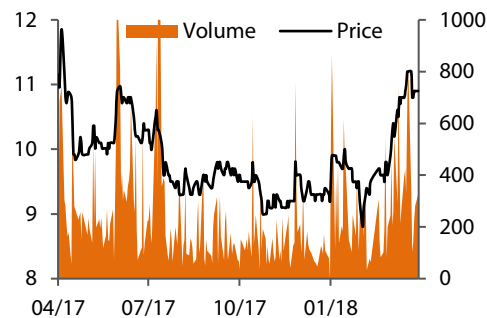
+38%

CMP (VND)	11,200
Target price (VND)	15,500
Cash Dividend (VND)*	1,200

(*)Forecasted in the next 12 months

Stock Info

Sector	Materials
Market Cap (VND billion)	410
Current Shares O/S (million)	37.6
Avg. Daily Volume (in 20 sessions)	354,320
Free float (%)	85.4
52 weeks High	11,854
52 weeks Low	8,800
Beta	-0.03



Performance (%)

	1M	3M	1Y
VGS	10.1	17.2	-2.3
Basic materials	-6.2	7.7	40.7
VN30 Index	7.4	24.0	66.1
VN Index	25.6	25.6	64.1

Major Shareholders (%)

Le Minh Hai (Chairman)	7.6
Nguyen Thi Thanh Thuy (Wife)	6.3
Nguyen Vu Le	4.8
Remaining Foreigner Investor Room (%)	42.3

Trinh Nguyen

(084) 08- 6299 2006 – Ext 1331

trinh.nh@vdsc.com.vn

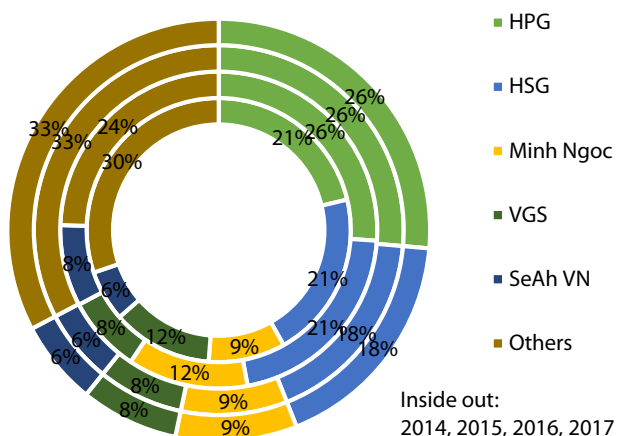
Company overview

Vietnam Germany Steel Pipe JSC (HNX: VGS) is one of the two steel producers operating under the brand name “Thép Viet Duc”. VGS produces and sells different types of steel pipes. VGS held 6.5% of the total domestic market in 2017 but 9.3% in the north part of the country.

Major products of VGS include plain, galvanized and coated sheet pipes, which accounts for over 50% of VGS’s revenues, while the remaining is derived from trading cold rolled products. The steel pipe segment has a remarkably higher gross margin compared to that of trading activities. Additionally, VGS also possesses operating assets that include an office tower and a number of high-end apartments located within Binh Xuyen Industrial Park, albeit only contributing 0.2% of VGS’s revenue in 2017.

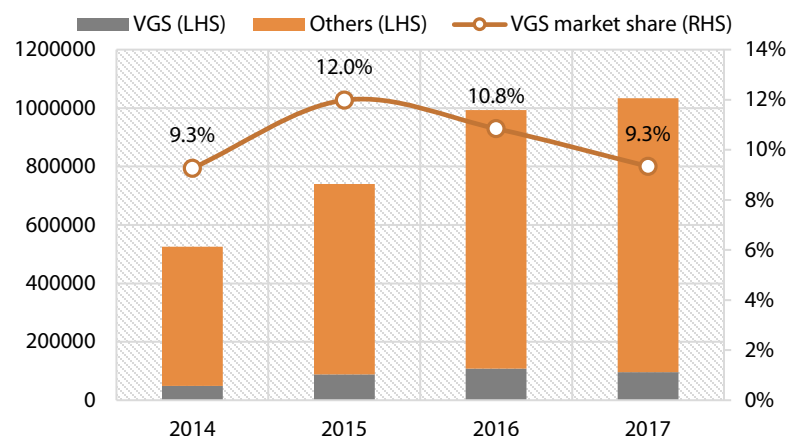
VGS’s major input is hot rolled coils (HRC), which is treated through cold-rolling, galvanizing and welding processes. At the end of 2017, VGS operated 2 cold-rolling lines, 4 welding lines, 3 galvanizing lines and 1 stripping line. Its total capacity is around 600,000 tons per year and the utilization rate was 62% in 2017.

Figure 01: Domestic steel pipe market share



Source: GSO, RongViet Securities

Figure 02: VGS’s sales volume and market share in northern Vietnam



Source: VGS, RongViet Securities

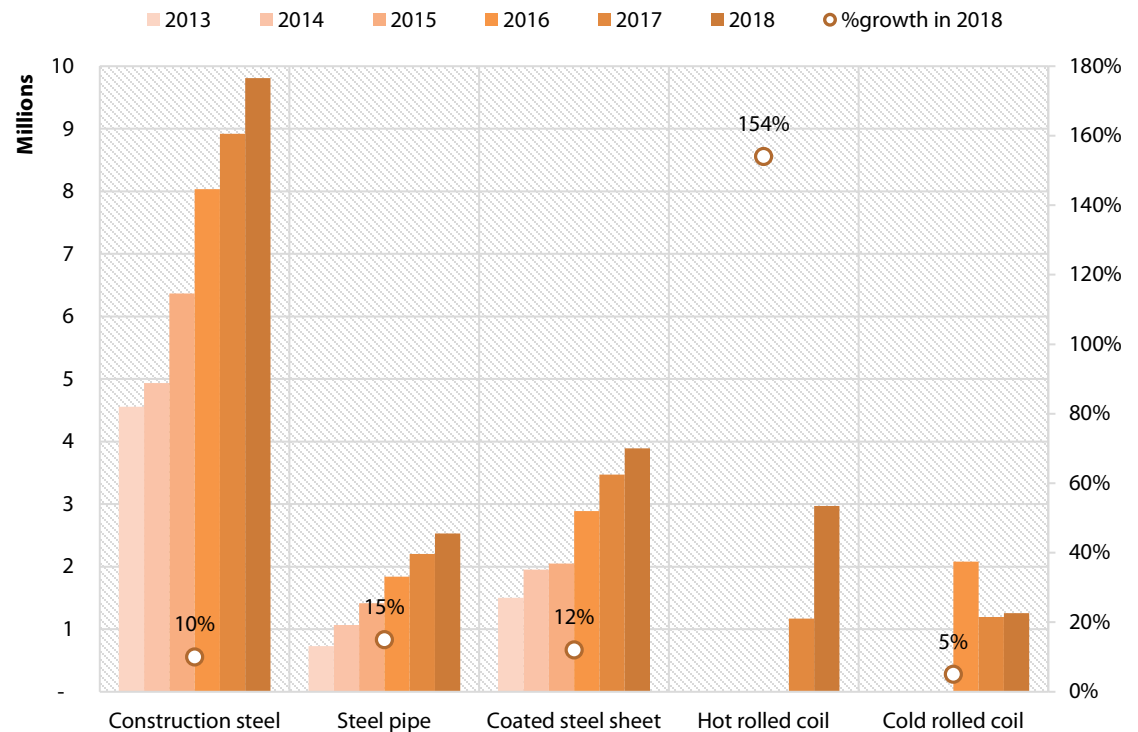
Investment rationales

The steel industry is forecasted to continue to grow in 2018.

According to the Vietnam Steel Association (VSA), the steel industry is forecasted to grow by 20% to 22% in 2018, creating ample room for steel makers’ growth. In particular, welded steel pipe demand is going to increase by 15%, coated steel sheet demand can grow by 12%, construction steel by 10% and CRC by 5%. As VGS’s revenue comes from steel pipe, coated steel sheet and CRC, the company is going to benefit from a favorable outlook in 2018. Besides, VGS gets 28% of its profits from the construction steel business. This industry is forecasted to grow strongly in 2018 as well. VGS’s 2018 volume growth is supported by promising developments in the industry.

Indeed, the capital flows into Vinh Phuc, VGS’s major operating location, imply a strong demand for construction in the area. Lead by numerous road infrastructure projects initiated, construction material demand in the area can grow substantially in the near future, which is likely to benefit the leading building material firms in the local region. Moreover, VGS has participated in road building projects in Hanoi as a steel pipe supplier, which shows its reputation when it comes to public projects. Thus, VGS not only is able to dominate Vinh Phuc, but also can become a supplier for many larger infrastructure projects in the capital city of Vietnam. This can be another advantage for VGS to boost its revenues in the coming years. We forecast that VGS’s sales volume and revenues will grow by 19% and 28% in 2018 respectively.

Figure 03: Steel industry growth forecasts



Source: VSA

Table 01: Road projects in Vinh Phuc

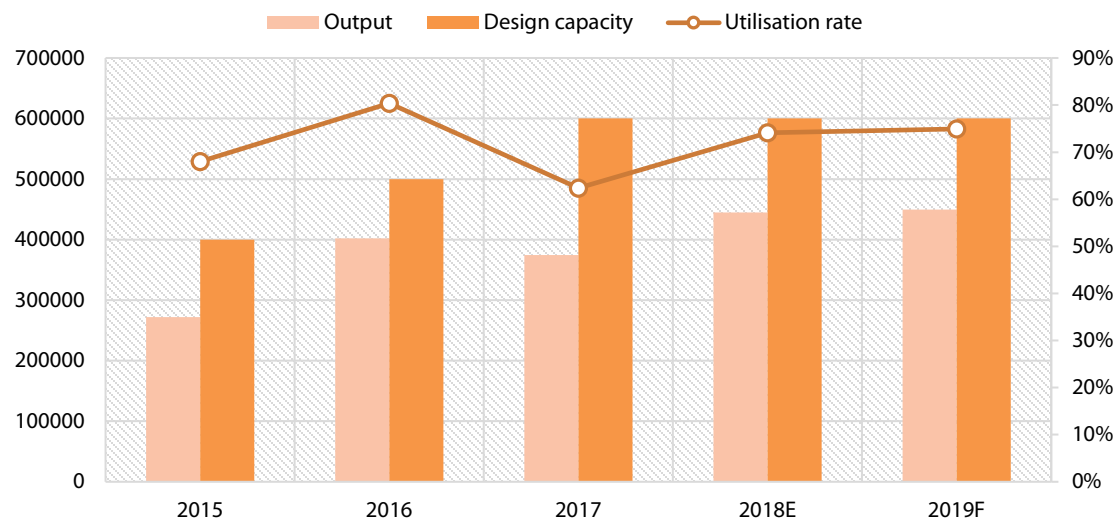
- 1 Yen Lac - Vinh Yen road (part of Vinh Yen city)
- 2 Road to the Dam Dien urban area connecting Yen Lac - Vinh Yen
- 3 Ton Duc Thang Street (Vinh Yen - TL302)
- 4 Ring Road 2 of Vinh Yen (from Ton Duc Thang Boulevard)
- 5 Upgrade provincial road 302 (section from Huong Canh - Gia Khanh)
- 6 New road through the geothermal pond (from Tan Phong, Binh Xuyen - Trung Nguyen, Yen Lac - Hoi Hop, Vinh Yen)
- 7 Provincial road 310 (Ba Thien - Dao Tu industrial zone)
- 8 Hop Thinh - Dao Tu
- 9 Binh Xuyen - Yen Lac - Vinh Tuong urban center line (Vinalines road)
- 10 Highway 2: Vinh Yen - Viet Tri section has not been upgraded
- 11 National highway 2C to Tuyen Quang: National highway 2C is under renovation and upgrading
- 12 Highway 2C to Son Tay: renovate and upgrade National Highway 2C and Vinh Thinh Bridge (under construction)
- 13 Main road down south of Dam Vac: Kim Ngoc road through Dam Vac bridge to Vinh Yen crossing and Dam Vac bridge
- 14 Provincial road 305 (section from ring road 1 to outer ring)
- 15 Provincial road 305 (Tien bridge Ben Gao)
- 16 Hanoi ring road 4.5 (section TL301 Dai Lai - Deo Nhe) has not been implemented
- 17 Ton Duc Thang Street (Binh Xuyen District) and Nguyen Tat Thanh Street (Binh Xuyen and Phuc Yen Districts)

Source: Vinh Phuc Department of Planning and Investment

VGS has strong advantages: future sales and output growth

VGS can boost output quickly without further spending on Capex just by raising its utilization rate. VGS's 600,000 ton-per-year capacity is currently at 62%, which means ample room for growth. Having the cold rolling line, GI line, welding line and stripping line, VGS can supply a variety of products to meet the market demand. Furthermore, the wide variety of production lines allows VGS to sell the remaining semi-products under what it calls 'trading activities'. In short, compared to other steel makers who run their mills at full capacity, VGS has various opportunities to boost revenue thanks to the low utilization rate.

Figure 04: VGS's output and utilization rate



Source: VGS, RongViet Securities

VGS can save a considerable amount on cost of sales in the coming years thanks to its accounting treatment regarding machinery. In particular, out of VND 295.264 billion of machinery at cost, VND 63.160 billion was fully depreciated in 2017 but this machinery is still being used. That was because the company has been depreciating new machinery in only two years, while other fixed assets were depreciated from 5 to 30 years. Accordingly, VGS's depreciation expense is forecasted to decrease by around VND 20 billion from VND 50 billion in 2017, directly boosting its gross profit. We predict that VGS's gross profit grows by VND 79 billion in 2018, up by 34%, in which 20 billion comes from the depreciation expense cut. At the end of 2018, VGS's machinery carrying amount will only be VND 12 billion, meaning that all operating machines will have been fully depreciated, as from then on VGS can raise its gross margin by 0.2 percentage points per year until 2020.

Table 02: Scenario analysis: Effect of change in steel pipe prices and volumes to NPAT (Base case: 15% increase in steel pipe volumes, 5% increase in prices).

%change in NPAT		% change in volume				
		-10%	-5%	0%	5%	10%
% change in price	2%	-2%	2%	6%	10%	14%
	1%	-5%	-1%	3%	7%	11%
	0%	-7%	-4%	0%	4%	7%
	-1%	-10%	-7%	-3%	0%	4%
	-2%	-13%	-10%	-6%	-3%	0%

Source: RongViet Securities

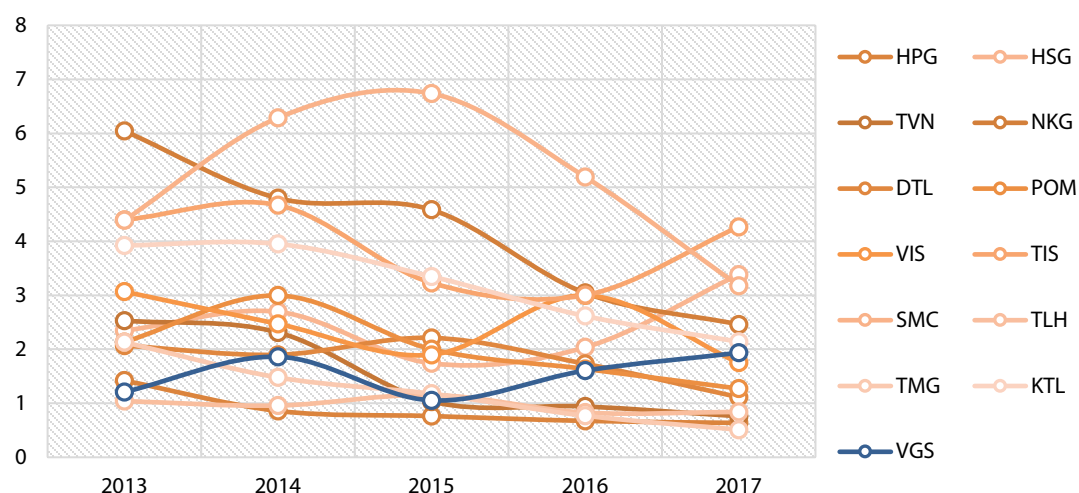
Upon conducting a sensitivity analysis, we found out that VGS's NPAT is highly sensitive to changes in steel prices while changes in volumes do not affect its net profits as much. A 1% increase in HRC and steel pipe sales prices can increase VGS's EPS by 3%. However, we expect steel prices to stabilize in the near

future as the domestic supply is increasing strongly and the dependence on imports is declining, creating a more stable environment.

VGS compared to industry peers

VGS use an impressively minimal amount of long-term borrowing, in contrast to all other steel makers in the domestic market. Most of VGS's borrowing is short-term working capital, which has been increasing strongly since 2015 with interest rate ranging from 5.8% to 7%. Capex for expansion in the future might be small, thus the company is able to maintain a low level of leverage and minimize its interest risks. We consider the relatively low debt ratio (Figure 05) compared to other Vietnamese steel companies to be a comparative advantage for VGS, even though it implies that the company is not aggressive in its capacity expansion plans and may risk losing market share.

Figure 05: Total debt/Total equity ratios of Vietnamese steel companies



Source: RongViet Securities

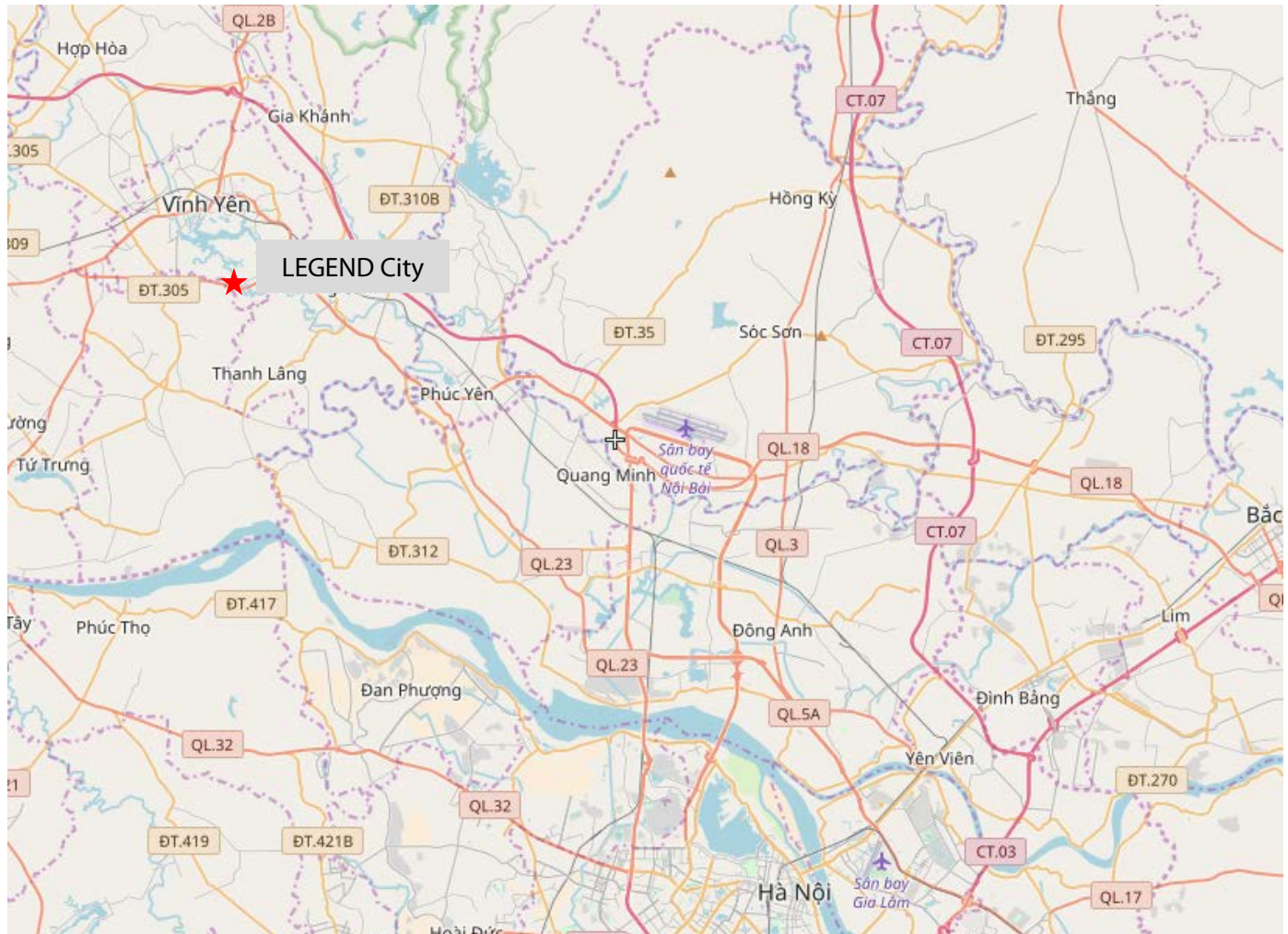
VGS's conservative strategy also embodies its consistent dividend cash payments. While most steel makers tend to retain money to spend on Capex or working capital, VGS has been paying cash dividends to shareholders since 2009. The cash dividends of VND 1,000 and VND 1,500 per share in 2016 and 2017 respectively were considered impressive. Dividend yields were 11% and 16%. In 2018, the company plans to pay from VND 1,000 to VND 1,200 cash dividend, which is equivalent to a 9.1% to 10.9% yield. Therefore, the appealing dividend policy is worth to consider when investing in VGS.

Regarding cash flow, VGS has been spending on working capital but we expect that the current situation will not go on in the future. VGS generated over VND 100 billion in cash flow from profit and depreciation but spent heavily on cash out flows for inventories and receivables while not receiving favorable credit terms from its suppliers. In 2016 and 2017 a total of VND 433 billion was locked in inventories and VND 376 billion in giving credit to customers, but only VND 167 billion flew in under the 'creditor account'. This could be partly attributed to the strict terms VGS has to follow when importing HRC and the flexible policies it has to give out to customers in order to maintain business relationships, especially when it comes to sales for public projects. Nevertheless, the majority of the cash outflow was spent on stocking inventories, which is reasonable as VGS was expanding its production during 2015-2017. We expect that the cash outflow will be reduced in the future, as VGS does not have plan to raise capacity strongly in the next few years. Hence, cash outflows for working capital will be funded by short-term liabilities and VGS can generate a stable FCFE of over VND 70 billion per year on average during 2018-2022.

The residential project in Vinh Phuc is a potential catalyst

VGS is the developer for Viet Duc LEGEND City, a 25ha residential complex in Vinh Phuc. Situated along the newly built highway connecting Vinh Yen and Hanoi, LEGEND City is only 17 kilometers from Noi Bai International Airport and 40 kilometers from Hanoi center. The project has received approval for construction and consists of over 823 housing units including apartments, town houses and villas integrated with various functional areas. VGS is currently conducting clearance on the site and is planning to start sales in 2018.

Figure 06: LEGEND City's location



Source: RongViet Securities

Table 03: Other information on LEGEND City

Total land area	234,967 sqm
Construction area	61,437 sqm
Construction density in the area	26% ¹
Estimated number of residents	3,386 persons
Number of housing units	823
In which:	
Villas	215
Town houses	248
Apartments	203
Affordable apartments	157
Forecasted investment	VND 936 billion
Expected average selling price	VND 10.9 million per sqm
Forecasted revenues	VND 1,424 billion
Forecasted profits	VND 311 billion
NPV	VND 89 billion
IRR	40%

Source: VGS, RongViet Securities

From a preliminary perspective, this project will be valuable for VGS. We think there are several advantages for VGS, even though real estates is not its core business and joining the housing market is often considered risky by investors. Firstly, VGS has a good reputation of operating accommodation facilities, which creates potential demand for housing products developed by the company itself. Secondly, the demand from people working in the surrounding industrial parks is promising. According to management, VGS employees and workers residing in the area reacted quite positively to the project's initiation. Additionally, VGS has designed LEGEND City to provide a wide range of property to fit different types of customers, namely villas for the high income, apartments and affordable apartments for workers and town houses for investors. Another advantage is that the land lot is assigned to VGS by the local government, so the infrastructure cost will be deducted from the land use fee, resulting in a lower initial outlay for VGS regarding land use right. Accordingly, VGS can start the site clearing activities and proceed to pre-selling units to receive cash inflows. Therefore, we expect the project to have a relatively low leverage; at only 20% of the total investment, mainly for infrastructure construction. These advantages can enable VGS to set an attractive pricing for the project. The premium location is expected to draw attention from potential buyers who want to own or invest in a house near Hanoi.

Checklist: X indicates annual contributions from these four activities.

	2018	2019	2020	2021	2022
Sales	X	x	x		
Cash receipts	X	x	x	x	
Construction	X	x	x	Handover	
Revenues				x	x

Using a 11.6% WACC for the project and the above assumptions, we estimate LEGEND City's Net present value at VND 88.99 billion, equivalent to an extra VND 2,367 per share. We separate this project from VGS's valuation as it is not an operating business, which will only generate a one-off cash flow, but we consider this project to be a potential strong catalyst for VGS in 2018 as the company will soon put LEGEND City for sales.

¹ As a % of available land.

	VND Billion			
INCOME STATEMENT	FY2016	FY2017	FY2018F	FY2019F
Revenue	4,551	5,980	7,651	7,895
COGS	4,301	5,748	7,340	7,564
Gross profit	250	233	311	330
Selling Expense	102	78	100	103
G&A Expense	31	41	54	58
Finance Income	14	10	8	8
Finance Expense	33	47	58	61
Other profits	-5	0	0	0
PBT	97	84	114	125
Prov. of Tax	16	12	16	18
Minority's Interest	0	0	0	0
PAT to Equity Shareholder	82	71	98	108
EBIT	116	114	157	169
EBITDA	179	165	211	225

FINANCIAL	FY2016	FY2017	FY2018F	FY2019F
Growth (%)				
Revenue	32.7	31.4	27.9	3.2
EBITDA	90.3	-7.8	27.6	6.4
EBIT	87.7	-2.2	38.1	8.0
PAT	77.6	-12.4	37.8	9.4
Total assets	39.8	13.7	15.7	1.2
Total equity	10.3	0.9	6.5	7.4
Profitability (%)				
Gross margin	5.5	3.9	4.1	4.2
EBITDA margin	3.9	2.8	2.8	2.8
EBIT margin	2.6	1.9	2.1	2.1
Net margin	1.8	1.2	1.3	1.4
ROA	5.4	4.1	4.9	5.3
ROCE	18.4	18.3	23.5	23.6
ROE	14.0	12.1	15.7	16.0

Efficiency (x)				
Receivables turnover	6.8	8.5	8.5	8.7
Inventories turnover	10.7	9.1	10.0	10.0
Payables turnover	11.8	18.0	15.4	16.4

Liquidity (x)				
Current	1.2	1.2	1.3	1.3
Quick	0.8	0.7	0.7	0.7

Finance Structure (%)				
Total debt/equity	91.4	134.3	136.6	125.7
ST debt/equity	89.7	133.6	136.6	125.7
LT debt/equity	1.6	0.7	0.0	0.0

	VND Billion			
BALANCE SHEET	FY2016	FY2017	FY2018F	FY2019F
Cash and cash equivalents	11	16	15	26
Short-term investments	0	0	0	0
Accounts receivable	672	705	896	904
Inventories	404	634	734	756
Other current assets	8	23	23	24
Property, plant & equipment	194	143	114	88
Acquired intangible assets	15	15	14	14
Long-term investments	101	99	108	117
Other non-current assets	115	95	97	97
Total assets	1,520	1,729	2,001	2,025
Accounts payable	364	320	476	461
Short-term borrowings	524	787	857	847
Long-term borrowings	9	4	0	0
Other non-current liabilities	21	2	2	3
Bonus and Welfare fund	19	27	37	40
Tech-sci. dev. fund	0	0	0	0
Total liabilities	937	1,140	1,373	1,351
Common stock and APIC	446	446	446	446
Treasury stock (enter as -)	0	0	0	0
Retained earnings	106	105	139	180
Other comprehensive income	2	5	5	5
Inv. and Dev. Fund	30	34	39	44
Total equity	584	589	628	674
Minority Interest	0	0	0	0

CASH FLOW STATEMENT	FY2016	FY2017	FY2018F	FY2019F
Profit before tax	97	84	114	125
-Depreciation	37	52	54	55
-Adjustments	44	30	-	-
+/- Working capital	(366)	(408)	(150)	(64)
Net Operating CFs	(188)	(243)	19	116
+/- Fixed Asset	39	2	(29)	-
+/- Deposit, equity investment	(10)	36	9	10
Interest, div, cash profit rec.	5	8	-	-
Net Investing CFs	34	46	(21)	10
+/- Capital	16	-	-	-
+/- Debt	157	258	74	(10)
Dividend paid & other	(34)	(56)	(79)	(106)
Net Financing CFs	139	201	(5)	(116)
Beginning cash & equivalents	26	11	23	15
+/- cash & equivalents	(14)	4	(7)	10
Ending cash & equivalents	17	23	15	26

Company Report

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

Bernard Lapointe

Head of Research

bernard.lapointe@vdsc.com.vn
+ 84 28 62992006 (1525)

Lam Nguyen

Senior Strategist

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

- Banking
- Conglomerates

Thien Bui

Senior Analyst

thien.bv@vdsc.com.vn
+ 84 28 6299 2006 (1321)

- Market Strategy
- Financial Services
- Personal Goods

Hieu Nguyen

Senior Analyst

hieu.nd@vdsc.com.vn
+ 84 28 6299 2006 (1514)

- Market Strategy
- Pharmaceuticals
- Aviation

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
- Food & Beverage

Trinh Nguyen

Analyst

trinh.nh@vdsc.com.vn
+ 84 28 6299 2006 (1331)

- Steel
- Construction
- Technology

Quang Vo

Analyst

quang.vv@vdsc.com.vn
+ 84 28 6299 2006 (1517)

- Market Strategy
- Basic Materials
- Personal Goods

Son Phan

Analyst

son.pnt@vdsc.com.vn
+ 84 28 6299 2006 (1519)

- Utilities
- Natural Rubber

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
- Retails
- Consumer chemicals

Thuy Nguyen

Analyst

thuy.nb@vdsc.com.vn
+ 84 28 6299 2006 (1528)

- Macroeconomics

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

Thao Dang

Analyst

thao.dtp@vdsc.com.vn
+ 84 28 6299 2006 (1529)

- Food & Beverage

Tam Pham

Analyst

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

- Fishery

Ha Tran

Assistant

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

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 2017 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").

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 Rosenblatt Securities Inc., 40 Wall Street 59th Floor, New York, NY 10005, a registered broker dealer in the United States. Under no circumstances should any recipient of this research report effect any transaction to buy or sell securities or related financial instruments through VDSC. Rosenblatt Securities 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.

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 Rosenblatt Securities 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.

Ownership and Material Conflicts of Interest

Rosenblatt Securities Inc. or its affiliates does not 'beneficially own,' as determined in accordance with Section 13(d) of the Exchange Act, 1% or more of any of the equity securities mentioned in the report. Rosenblatt Securities Inc, its affiliates and/or their respective officers, 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. Rosenblatt Securities Inc. is not aware of any material conflict of interest as of the date of this publication.

Compensation and Investment Banking Activities

Rosenblatt Securities Inc. or any affiliate has not managed or co-managed a public offering of securities for the subject company in the past 12 months, nor received compensation for investment banking services from the subject company in the past 12 months, neither does it or any affiliate expect to receive, or intends to seek compensation for investment banking services from the subject company in the next 3 months.

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.