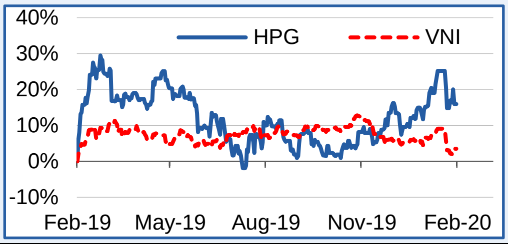
VIET CAPITAL SECURITIES

Hoa Phat Group (HPG) [BUY +40.8%]

Update Report

Industry	**Steel**
Report Date	**February 12, 2020**
Current Price	VND23,800
Current Target Price	VND33,500
Last Target Price	VND34,800
Upside to TP	+40.8%
Dividend Yield	0.0%
TSR	+40.8%

	2019	2020F	2021F	2022F
Rev y/y	14.0%	23.9%	21.6%	11.7%
EPS y/y	-14.3%	13.4%	23.1%	14.5%
GPM	17.6%	17.1%	17.1%	16.9%
NPM	11.8%	10.7%	10.9%	11.1%
EV/EBITDA	7.8x	5.8x	4.6x	4.3x
P/B	1.4x	1.2x	1.1x	1.0x
P/E	9.4x	8.3x	6.7x	5.9x



Market Cap	USD2.9bn
Foreign Room	USD294.0mn
ADTV30D	USD7.3mn
State Ownership	0.0%
Outstanding Shares	2.8 bn
Fully Diluted Shares	2.8 bn
3-year PEG	0.6

	HPG	Peers*	VNI
P/E (ttm)	9.4x	9.7x	16.4x
P/B (curr)	1.4x	0.8x	2.2x
Net D/E	64.3%	48.0%	N/A
ROE	17.0%	5.8%	13.5%
ROA	8.3%	2.3%	2.2%

** Regional peers*

Company Overview

HPG is Vietnam's largest private steel producer with 26% market share in construction steel (current designed capacity of 4.2 million tons/year) and 32% in steel pipes (nearly 800,000 tons/year). Other minor businesses include industrial manufacturing, real estate development and animal feed production.

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Outlook remains solid amid possible Q1 sector slowdown

- We reiterate our BUY rating on HPG while trim our target price by 4% to VND33,500/share. Although Q4 2019 results were broadly in-line with our expectation, we trim our 2020F NPAT-MI by 5% amid our own expectation of slow-moving domestic construction activities in Q1 2020 due to the recent coronavirus outbreak.
- We keep 2020F sales volume unchanged across steel product types. However, we cut our construction steel ASP assumption to VND12.1mn/ton (USD524) from VND12.3mn/ton (USD535) amid Q1's construction sector slowdown. Hence, we reduce 2020F revenue by 3% to VND78.9tn (USD3.4bn, +24% YoY) and NPAT-MI by 5% to VND8.5tn (USD368.0mn, +13% YoY).
- For 2020F, we expect the full commercial operation of Phase 1 and Phase 2 of Dung Quat Steel Complex (DQSC), a normalization of iron ore prices after a turbulent 2019 and HPG's further penetration into Vietnam's southern and central markets will be the key drivers for HPG's growth.
- Our view for HPG's long-term potential remains positive given 1) DQSC's capacity and steel product portfolio expansion, 2) HPG taking advantage of a challenging industry environment to win additional market share and 3) the company's superior profitability vs regional peers.
- Risks to our view: stronger-than-expected margin compression due to highly volatile iron ore prices.

We forecast robust 2020F sales volume growth as HPG continues to push for market share. HPG's 2019 construction steel sales volume reached 2.8 million tons (+17% YoY, equivalent to 26% market share in 2019), surpassing our previous forecast by 4%. Nevertheless, we maintain our 2020F construction steel sales volume of 3.3 million tons (+20% YoY) as we believe the coronavirus outbreak could potentially lead to slow-moving domestic construction activities in Q1 2020. Sales volume growth is mainly fueled by (1) DQSC's Phase 1 being ready to run commercially at full capacity and (2) HPG's ongoing aggressiveness in taking market share from small electric arc furnace (EAF) producers in southern and central Vietnam (details on pages 9-10).

We believe Q1's slow-moving construction activities could restrain the recovery of steel ASP. As Q4 is a busier season for domestic construction activities, HPG's construction steel ASP recovered from a 2019 low of VND11.0mn/ton (USD478) in October 2019 to reach VND11.25mn/ton (USD489) in December 2019 (as we previously expected) and is currently standing around VND11.4mn/ton (USD496). For 2020F, we expect ASP to stay flat YoY at VND12.1mn/ton (USD524) as slow-moving domestic construction activities amid the coronavirus outbreak could affect the recovery of steel ASP.

HPG is proposing a preliminary plan for the DQSC expansion project. HPG will collect written approval from shareholders from March 4 to March 23, 2020. This expansion project is proposed to have a total steel capacity of five million tons (including three million tons of HRC) with total investment of VND60tn (USD2.6bn). We believe this plan is still in early stages of planning and requires approval from both shareholders and authorities. Thus, we expect this news to have insignificant impact on HPG's operation in medium term as the company is still focusing on commencing the first two phases of DQSC. We have not yet factored the expansion project into our forecast. (details on page 6).

2019 recap: Highly volitile input costs hit profit despite strong sales volume growth

Figure 1: 2019 results

VND bn	2018	2019	% YoY Growth	2019F	2019 as % of 2019F	VCSC comments
Net revenue	**55,836**	**63,658**	**14.0%**	**64,760**	**98%**	
Steel	44,677	49,853	11.6%	50,073	100%	* 2019 construction steel sales volume reached 2.8 million tons (+17% YoY vs 6% YoY growth of the industry) and steel pipe sales volume reached 750,800 tons (+14.8% YoY). These volumes surpassed our full-year forecast by 4% for both construction steel and steel pipes. * HPG's construction steel ASP inched up to VND11.25mn (USD496) per ton in December 2019 after falling to a 2019 low of VND11.0mn (USD478) in October 2019, which was in conjunction with the trend of iron ore prices. For full-year 2019, HPG's ASP reached VND12.1mn/ton (USD524), equivalent to 9% YoY decrease. * HPG continues to solidify its position as Vietnam's largest steel producer with a 2019 market share of 26% in construction steel (vs 24% in 2018) and 32% in steel pipes.
Industrial	4,656	3,826	-17.8%	5,558	69%	
Real estate	1,742	1,659	-4.8%	1,741	95%	* 2018's main contributor was the Mandarin Garden 2 residential project while 2019 recorded a new contribution from the Yen My II Industrial Park (IP) in Hung Yen Province. This is the third IP that HPG has invested in and subsequently managed. The Pho Noi A IP in Hung Yen Province and the Hoa Mac IP in Ha Nam Province were the previous two.
Agriculture	4,617	7,987	73.0%	7,387	108%	* New contribution from the farming business.
Gross profit	**11,671**	**11,185**	**-4.2%**	**11,434**	**98%**	
SG&A expenses	-1,121	-1,442	28.7%	-1,587	91%	* Higher YoY as HPG is spending more on penetrating the southern and central markets ahead of DQSC's launch.
Operating profit	**10,550**	**9,743**	**-7.6%**	**9,847**	**99%**	
Financial income	294	471	60.1%	361	131%	
Financial expense	-772	-1,182	53.0%	-1,435	82%	* Higher YoY, mainly due to interest expenses from DQSC.
Net other gain/loss	-1	64	N/M	0	N/M	
PBT	10,071	9,097	-9.7%	8,773	104%	
NPAT	8,601	7,578	-11.9%	7,369	103%	
NPAT-MI	**8,573**	**7,508**	**-12.4%**	**7,308**	**103%**	
Real estate	483	445	-8.0%	427	104%	
Agriculture	152	559	268.4%	232	241%	* Better-than-expected segment recovery in Q4 2019 from African swine fever outbreak in early-2019.
Core NPAT	7,938	6,505	-18.1%	6,649	98%	* Excluding profit from real estate and agriculture.
Gross margin	**20.9%**	**17.6%**		**17.7%**		* After an iron ore price crisis in H1 2019, iron ore prices fell from a peak of nearly USD120/ton in late July 2019 to around USD90/ton as of end-Q3 and have fluctuated around USD85-90 since then. We estimate HPG's average iron ore costs of US80/ton in 2019 (+18% YoY). * Lower YoY amid highly volatile input material costs throughout the year as well as lower selling steel prices.
SG&A exp./Sales	2.0%	2.3%		2.5%		
Operating margin	18.9%	15.3%		15.2%		
NPAT-MI margin	**15.4%**	**11.8%**		**11.3%**		

Source: Company's Q4 2019 financial statements, VCSC forecast

2020 outlook: DQSC to fuel growth

Figure 2: 2020 forecast

VND bn	2019	2020F Revised	2020F Revised vs Old	2020F Revised vs 2019	VCSC assumptions for 2020F
Net revenue	**63,658**	**78,857**	**-3%**	**24%**	
Construction steel	33,459	40,208	-2%	20%	* We maintain our 2020F sales volume of 3.3 million tons (+20% YoY) despite better-than-expected Q4 2019 sales volume as we are conservative regarding slow-moving domestic construction activities in Q1 2020 amid the recent coronavirus outbreak. Volume growth is supported by the two blast furnaces of DQSC's Phase 1 that have been ready to run commercially at full capacity from December 2019. * We revise down our 2020F ASP to VND12.1mn/ton (USD526), which is flat vs 2019's level as we expect slow-moving domestic construction activities amid the coronavirus outbreak could weigh on the recovery of steel ASP despite a higher contribution from higher value-added products (such as PC bar, PS strand and PC wire) from DQSC. * We also continue to expect competition and additional capacity will cause HPG to maintain a competitive selling price strategy in 2020F.
Steel pipes	13,643	15,457	0%	13%	* We maintain our 10% volume growth forecast – equivalent to 820,100 tons sold. * Additional 10% capacity (equivalent to 77,000 tons per annum on top of 770,000 tons at end-2019F). HPG aims to gradually increase its steel pipe capacity each year.
Galvanized steel	2,715	5,400	0%	99%	* We keep our assumption of full capacity at 400,000 tons for 2020F – equivalent to 15% of Hoa Sen Group's (HOSE: HSG) current capacity. HSG currently has around 30% market share in galvanized steel sheets.
Industrial	3,840	4,224	-35%	10%	* We revise down due to lower-than-expected performance in 2019.
Real estate	1,669	1,586	0%	-5%	
Agriculture	7,988	11,982	8%	50%	* Higher contribution from the farming business. HPG is currently the leading Australian beef supplier in Vietnam with around 50% market share (rising from around 40% in 2018); the company is also a notable supplier of pork and chicken eggs in the North.
Gross profit	**11,185**	**13,500**	**-6%**	**21%**	
SG&A expenses	-1,442	-1,871	-5%	30%	* YoY higher in accordance with the sales growth forecast. * We expect HPG to continue spending more on penetrating the southern and central markets to facilitate DQSC's launch.
Operating profit	**9,743**	**11,629**	**-6%**	**19%**	
Financial income	471	608	46%	29%	
Financial expense	-1,182	-2,300	-7%	95%	* Higher YoY, mainly due to interest expenses on DQSC.
Net other gain/loss	64	66	N/M	2%	
PBT	9,097	10,002	-4%	10%	
NPAT	7,578	8,501	-5%	12%	
NPAT-MI	**7,508**	**8,463**	**-5%**	**13%**	
Real estate	445	471	10%	6%	
Agriculture	559	895	157%	60%	
Core NPAT	6,505	7,097	-12%	9%	* Excluding profit from real estate and agriculture.
Gross margin	**17.6%**	**17.1%**			* We maintain our assumption for average iron ore costs at USD70/ton (-13% YoY) as we expect iron ore costs to fall from 2019's abnormally high base due to supply disruption events during H1 2019.
SG&A as % sales	2.3%	2.4%			
Operating margin	15.3%	14.7%			
NPAT-MI margin	**11.8%**	**10.7%**			

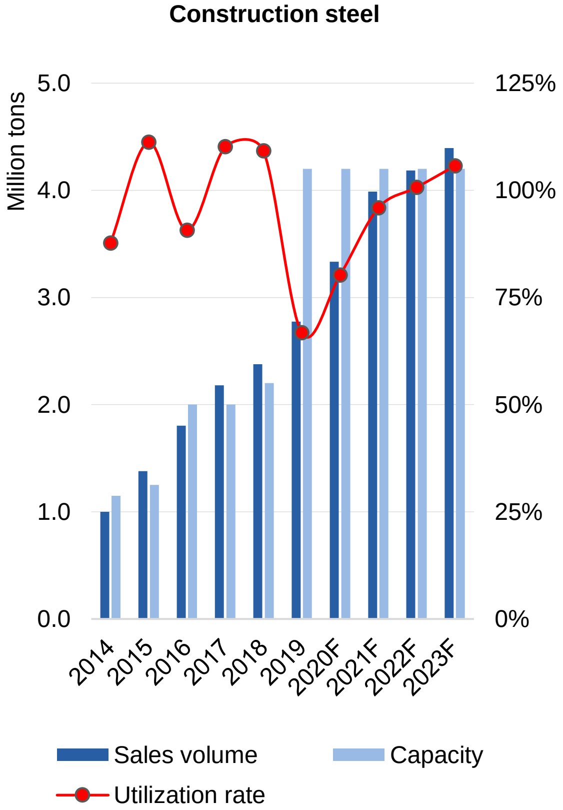
Source: Company's financial statements, VCSC forecast

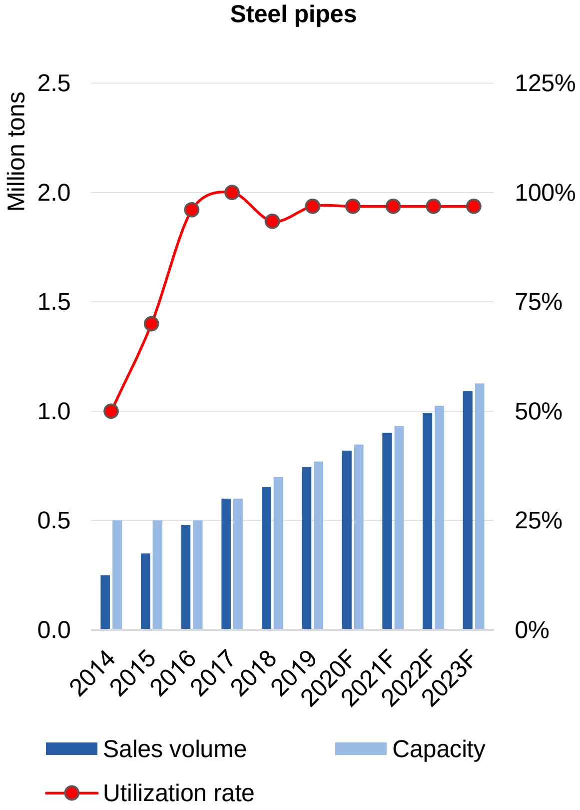
Figure 3: Assumptions on HPG's average construction steel selling prices and iron ore costs

VCSC assumptions	2018	2019	2020F	2021F	2022F	2023F
Previous forecast						
Construction steel sales volume (million tons)	**2.38**	**2.67**	**3.33**	**3.99**	**4.19**	**4.40**
From existing production plants	2.2	2.2	2.2	2.2	2.2	2.2
% Utilization rate	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
From Dung Quat Steel Complex	0.18	0.47	1.13	1.79	1.99	2.20
% Utilization rate	*8%*	*21%*	*52%*	*81%*	*90%*	*100%*
Construction steel ASP (VND mn/ton)	**13.1**	**12.1**	**12.3**	**12.5**	**12.7**	**12.9**
Average iron ore costs (USD/ton)	**68.0**	**77.0**	**70.0**	**69.0**	**68.0**	**67.0**
Current forecast						
Construction steel sales volume (million tons)	**2.38**	**2.78**	**3.33**	**3.99**	**4.19**	**4.40**
From existing production plants	2.2	2.2	2.2	2.2	2.2	2.2
% Utilization rate	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
From Dung Quat Steel Complex	0.18	0.58	1.13	1.79	1.99	2.20
% Utilization rate	*8%*	*26%*	*52%*	*81%*	*90%*	*100%*
Construction steel ASP (VND mn/ton)	**13.1**	**12.1**	**12.1**	**12.5**	**12.7**	**12.9**
Average iron ore costs (USD/ton)	**68.0**	**80.0**	**70.0**	**70.0**	**70.0**	**70.0**

Source: HPG, VCSC assumptions

Figure 4: HPG's designed capacity and sales volume by product





Source: HPG, VCSC forecast. Note: Utilization rate of construction steel is sales volume over year-end designed capacity; additional construction steel capacity in 2013, 2016 and 2019.

Dung Quat Steel Complex update

We attended the first site visit at Dung Quat Steel Complex (DQSC) on December 18, 2019. Overall, the trip reaffirmed our expectation that HPG is best placed among domestic steel producers to capture future domestic steel demand growth and gain market share thanks to the company's established scale, expertise and proven operational efficiency along with the ramp-up of new capacity from DQSC. More detailed information regarding the trip can be found in our analyst meeting note, HPG - Dung Quat Steel Complex begins commercial operation, dated December 19, 2020.

Phase 1 of DQSC is ready for commercial commencement. The two blast furnaces of Phase 1 finished their test running period and are ready to run commercially at full capacity; their operation effectively lifts HPG's total designed construction steel capacity to 4.2 million tons per annum. HPG expects to commence Phase 2 from Q2 2020. In addition to the main steel production facilities, HPG also showcased its investment in DQSC's deep-water seaport (consisting of 11 berths that can accommodate up to 200,000 DWT vessels), electrical plant (able to supply up to 70% of DQCS's electricity demand) and waste processing facilities.

Management is confident regarding DQSC's cost competitiveness. According to HPG management, DQSC's production cost (excluding depreciation expenses) is currently lower than that of its Hai Duong plant (HPG's existing primary production facility) for two main reasons: 1) DQSC has a deep-water seaport that allows faster and more effective delivery of input materials (i.e., iron ore and coking coal); and 2) DQSC's modern technology and machines are more efficient as current real production data has shown lower input material consumption rates compared to those of the Hai Duong plant.

Figure 5: Photos of HPG's Dung Quat Steel Complex – Phase 1 and Phase 2 area

Source: VCSC compilation

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HPG is asking for shareholder approval in principle for the preliminary plan of Dung Quat Steel Complex expansion project

HPG is proposing a preliminary plan for the Dung Quat Steel Complex (DQSC) expansion project. The company will collect written approval from shareholders from March 4, 2020 to March 23, 2020. The record date for the shareholder list is March 2, 2020.

This expansion project is in addition to DQSC's current development that includes two phases: Phase 1 is for construction steel with a designed capacity of two million tons and Phase 2 is for hot rolled coil (HRC – an input material for steel sheets) with a designed capacity of two million tons. Per HPG's management, the construction process for these two phases was 98% complete as of December 2019 while Phase 1 is ready to run commercially at full capacity.

The expansion project is proposed to have two phases, which we now refer to as Phase 3 and Phase 4 of DQSC. These two phases will have a total steel capacity of five million tons (including three million tons of HRC, one million tons of medium-size shaped steel, 500,000 tons of high-quality wire rod and 500,000 tons of tool steel). The total investment for this expansion project is proposed to be VND60tn (USD2.6bn) with VND50tn (USD2.2bn) for capex and VND10tn (USD435mn) for working cap. This investment will be funded by HPG's equity (60% of capex) and debts (40%). This new facility will span a 166-ha area next to the existing DQSC (430 ha).

Although the detailed timeline for this expansion is not yet available, we believe this plan is still in its very early stages of planning and requires approval from both shareholders and authorities. This plan also comes as no surprise as HPG has communicated its ambition for an expansion beyond Phase 1 and Phase 2 since the inception of DQSC. The product portfolio of Phase 3 and Phase 4 also reflects HPG's product diversification process as the company is now adding more high-quality and specific steel products in addition to its traditional construction steel (i.e., rebar). We have not yet factored the expansion project into our forecast.

Figure 6: Dung Quat Steel Complex's area map

DQSC's current development: Phase 1 and Phase 2 is within the red border with total area of 430ha.
DQSC's expansion project proposal: Phase 3 and Phase 4 is within the yellow border with total area of 166ha.

Source: VCSC compilation.

Industry update

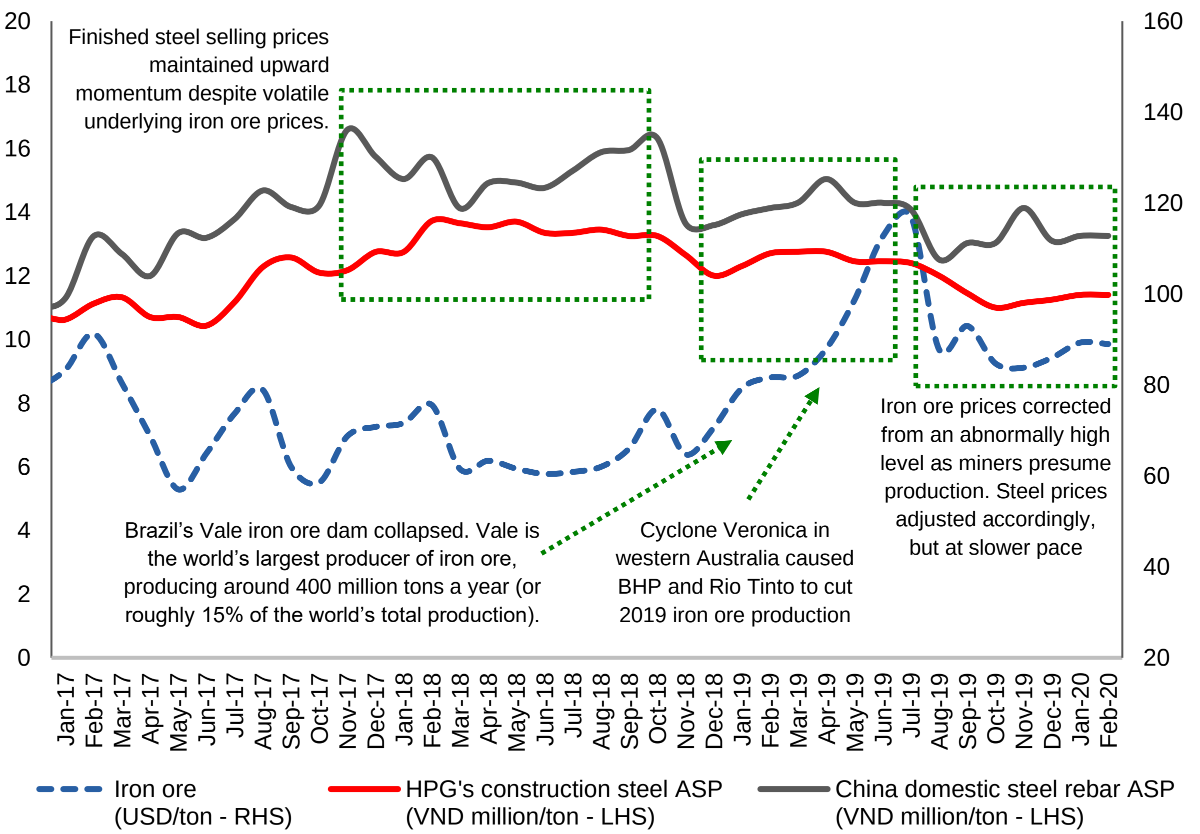
Iron ore prices trended sideways in USD85-90/ton range while ASP slightly recovered.

In H1 2019, the steel industry was heavily impacted by a series of supply disruptions from the world's top three iron ore miners. In January 2019, the collapse of Vale's Brumadinho dam in Brazil caused iron ore prices to shoot up to more than USD80 per ton. Iron ore prices continued to climb to nearly USD90 per ton in late March 2019 as BHP and Rio Tinto cut their iron ore product output due to Cyclone Veronica in Australia. Since Q2 2019, even though Vale, BHP, and Rio Tinto gradually resumed their production, iron ore prices rallied further (which we believe was due to market speculation) to around USD90-120/ton. Since mid-October 2019, iron ore prices have corrected by ~30% to USD80-90/ton (similar to the end of Q1 2019) from a peak of ~USD120/ton in July 2019 as key iron ore miners recommenced the major part their production capacity. Looking forward, although the recent coronavirus outbreak could put a certain pressure on iron ore prices due to the expectation of slower demand from China, we believe the opportunity for steel producers to expand margin on lower input costs is narrow as demand for finished products could also drop.

In conjunction with the downward trend of iron prices in H2 2019, domestic steel prices have adjusted to partially reflect softer input costs. HPG's construction steel ASP fell from VND12.4mn (USD539) per ton in July to a 2019 low of VND11.0 (USD478) in October 2019. As Q4 is a busier season for domestic construction activities, HPG's construction steel ASP inched up to VND11.25mn (USD496) per ton in December 2019, as we expected. For full-year 2019, HPG's ASP reached VND12.1mn/ton (USD524), which is equivalent to 9% YoY decrease. For 2020F, we expect ASP to stay flat vs 2019 level as we believe slow-moving domestic construction activities in Q1 2020 amid the coronavirus outbreak could weigh on the recovery of steel ASP.

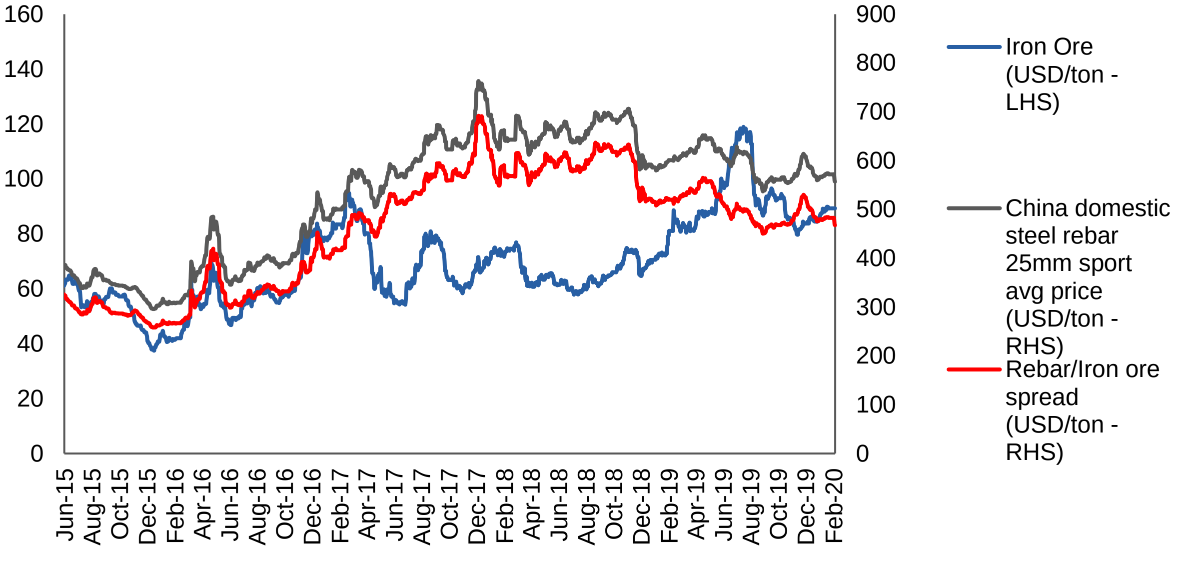
Over the long run, we maintain our view that fundamentally healthier global demand-supply dynamics deriving from China's ongoing aggressive supply-side restructuring since 2017 will be the key factor that underlines the steel market and finished steel selling prices — helping to gradually neutralize the impact of possible disruptions from both the supply and demand sides (similar to the iron ore supply disruption in H1 2019).

Figure 7: HPG's average construction steel selling prices vs iron ore prices



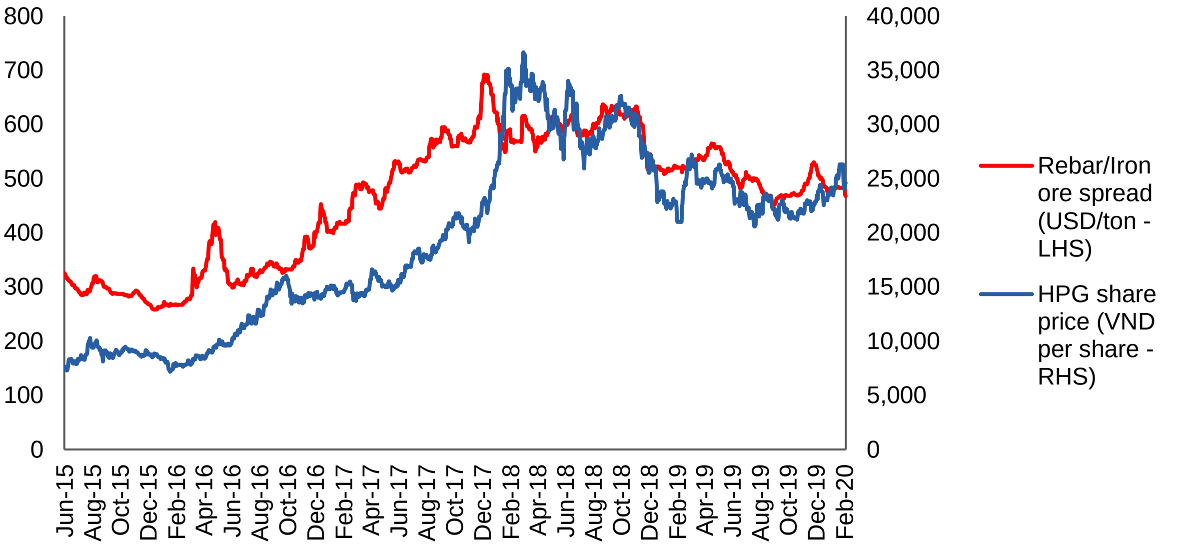
Source: Bloomberg and Vietnam Steel Association, VCSC

Figure 8: Spread between benchmark iron ore (63% Fe – delivered to Qingdao) price and Chinese rebar price



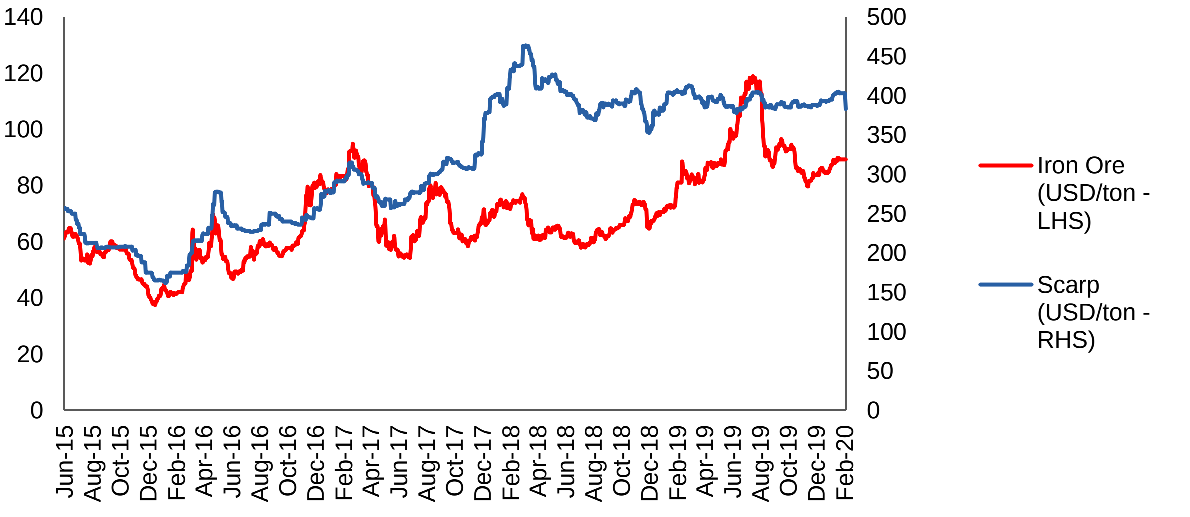
Source: Bloomberg, VCSC compilation

Figure 9: Correlation between rebar/iron ore spread and HPG share price



Source: Bloomberg, VCSC compilation

Figure 10: Benchmark iron ore price and scrap price

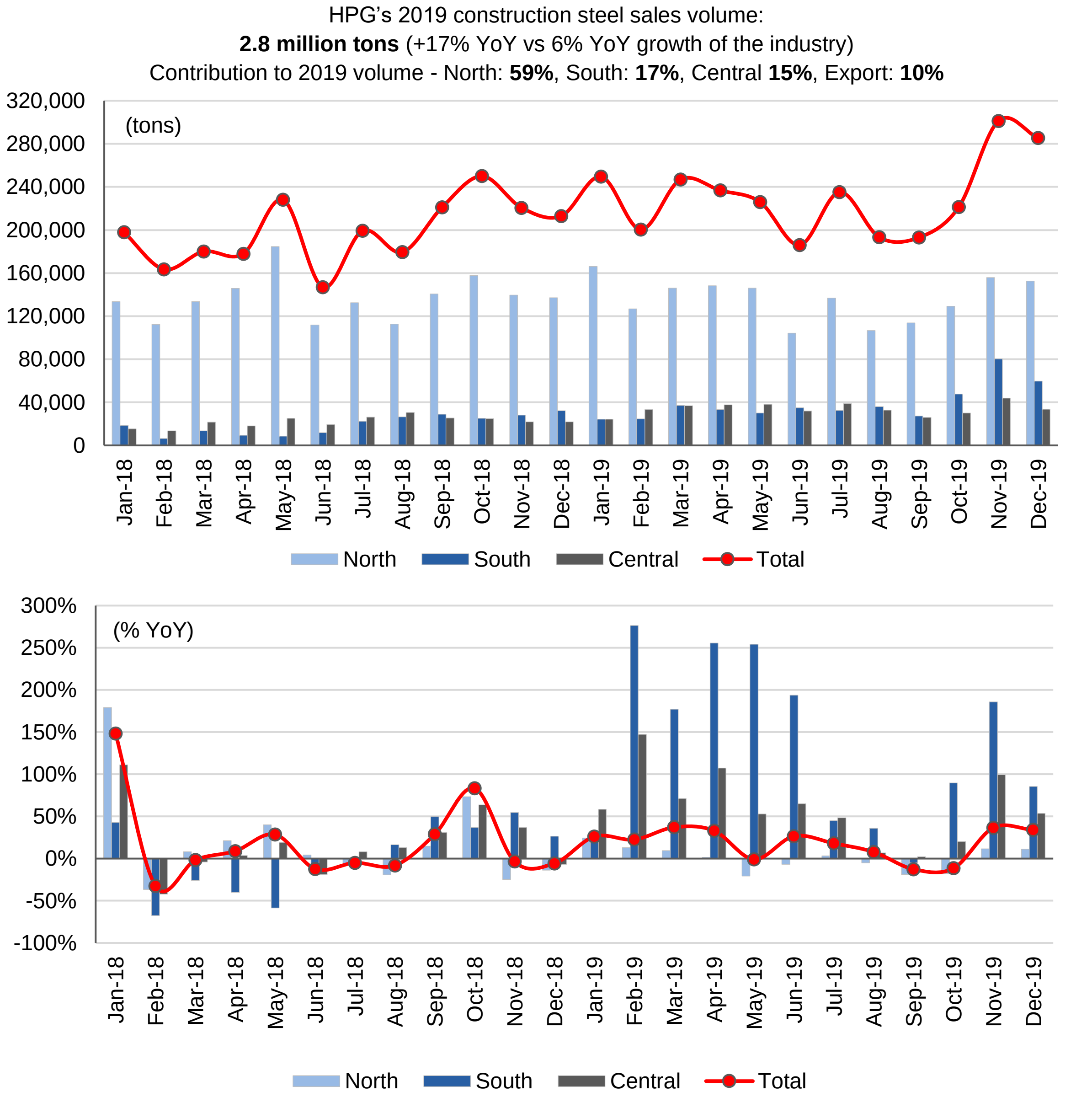


Source: Bloomberg, VCSC compilation

HPG is leading the steel industry's consolidation trend and positioning itself to be the clear champion for the long run.

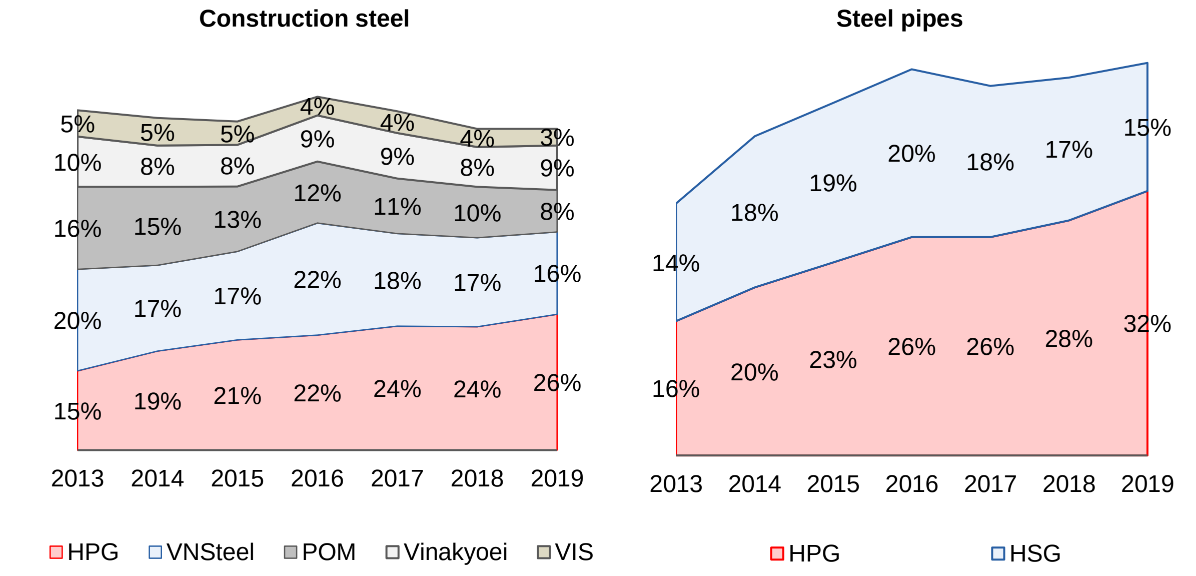
As stated in our steel industry outlook in Vietnam Strategy 2020 - Premium growth in a slow growth world (pages 124-125), dated January 6, 2020, we reiterate our view that the construction steel industry is undergoing a market consolidation led by HPG. With the total market growing slower and the ramp-up from Dung Quat Steel Complex commencement expected to occur in 2020, HPG has been very aggressive in taking market share and squeezing profits of small electric arc furnace (EAF) producers in southern and central Vietnam in 2019. Evidence of HPG's aggressive sales strategy toward Vietnam's southern and central markets is demonstrated by the company's series of customer conferences for its distributors and by HPG's strong growth from a low base of construction steel sales volume in these two markets (Figure 11).

Figure 11: HPG's monthly construction steel sales volume by regions



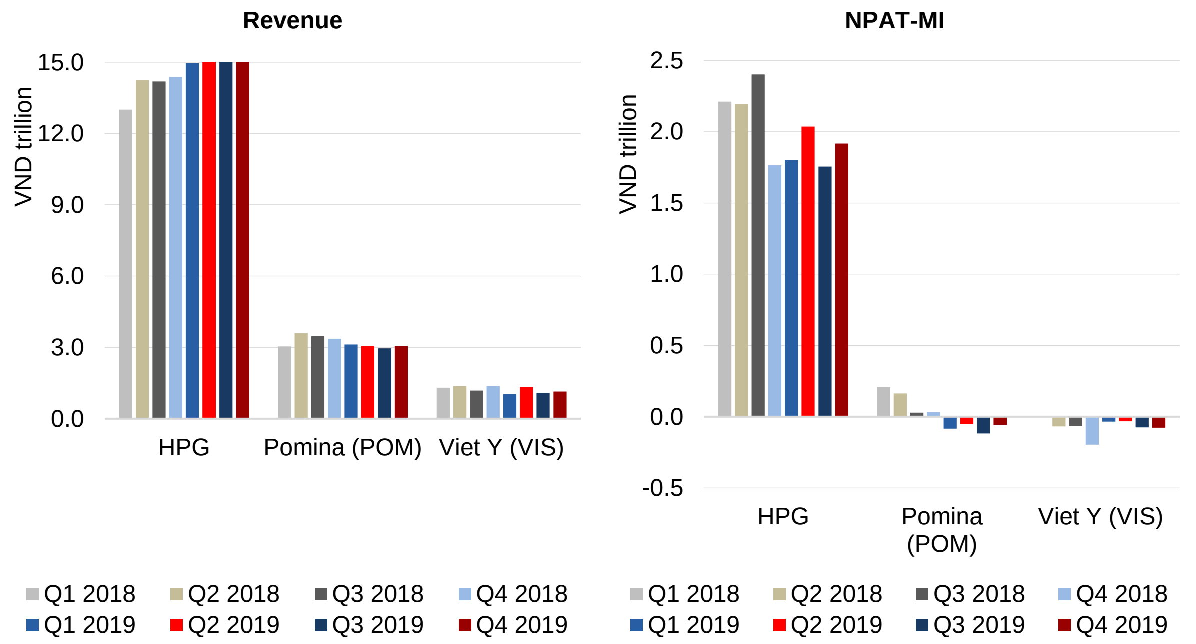
Source: VSA, VCSC compilation. Note: The North of Vietnam is HPG's traditional market that is being served by capacity from HPG's existing production plants that are also located in the North (Hai Duong Province and Hung Yen Province). Meanwhile, DQSC, which is located in the central Vietnam (Quang Ngai Province), strategically targets the central and southern markets.

Figure 12: Construction steel and steel pipe market share of major producers



Source: VSA, VCSC compilation

Figure 13: Quarterly revenue and earnings of top three listed local construction steel producers



Source: Bloomberg, companies' financial statements, VCSC compilation.

Local steel companies are proposing an extension for the construction steel protection tariff.

In 2019, the Ministry of Industry and Trade (MoIT) announced a five-year anti-dumping tariff on color-coated (pre-painted) steel products imported from South Korea and China, effective from October 24, 2019. The imported color-coated steel products have already had import quotas and out-of-quota tariffs, hence this anti-dumping tariff helps to add another layer of protection for local products. We note that it also proves the Government's determination in protecting the local steel industry.

HPG is working with other steel producers and the Vietnam Steel Association (VSA) to propose an extension for the construction steel protection tariff that has been effective since August 2016 and is set to expire in March 2020. Per management, necessary documents have already been submitted to MoIT for consideration; the possible extension time ranges from around two to three years.

In our opinion, while extended protection is positive for the sector, we believe the pressure from China dumping steel is set to be much less now than it was when the tariffs were imposed; this is due to China's steel oversupply situation improving over the last three years and China's amount of exported steel declining to a more healthy level.

Figure 14: Vietnam's active trade protection measures on steel products

<table>
<tr><th></th><th colspan="4">Construction steel</th><th>Galvanized steel sheet</th><th colspan="4">Pre-painted galvanized steel sheet</th></tr>
<tr><td>MoIT's decision</td><td colspan="4">No. 2968/QD-BCT issued on July 18, 2016</td><td>No.1105/QD-BC issued on March 30, 2017</td><td colspan="3">No. 1931/QD-BCT issued on May 31, 2017</td><td>No. 3198/QĐ-BCT Issued on October 24, 2019</td></tr>
<tr><td>Type of trade protection</td><td colspan="4">Anti-dumping tariff</td><td>Anti-dumping tariff</td><td colspan="3">Quotas and out-of-quota tariff</td><td>Anti-dumping tariff</td></tr>
<tr><td>Status</td><td colspan="4">four-year final</td><td>five-year final</td><td colspan="3">three-year final</td><td>five-year final</td></tr>
<tr><td>Products</td><td colspan="4">Steel billet and long steel</td><td>Galvanized steel sheet (35 codes)</td><td colspan="3">Pre-painted galvanized steel sheet (8 codes)</td><td>Pre-painted galvanized steel sheet (13 codes)</td></tr>
<tr><td>Imports' origin</td><td colspan="4">All countries</td><td>China (including Hong Kong) and South Korea</td><td colspan="3">All countries</td><td>South Korea and China</td></tr>
<tr><td rowspan="7">Rate</td><td colspan="2">Steel billet</td><td colspan="2">Long steel</td><td rowspan="7">3.17% - 38.34% depends on specific producer</td><td rowspan="3"></td><td rowspan="3">Total imported quota (tons)</td><td rowspan="3">Out-of-quota rate</td><td rowspan="3">Anti-dumping</td></tr>
<tr><td rowspan="2">March 22, 2016 to March 21, 2017</td><td rowspan="2">23.3%</td><td>March 22, 2016 to August 1, 2016</td><td>14.2%</td></tr>
<tr><td>August 2, 2016 to March 21, 2017</td><td>15.4%</td></tr>
<tr><td>March 22, 2017 to March 21, 2018</td><td>21.3%</td><td>March 22, 2017 to March 21, 2018</td><td>13.9%</td><td>Jun 15, 2017 to Jun 14, 2018</td><td>380,679</td><td>19%</td><td rowspan="4">2.53% - 34.27% for Chinese imports (depends on specific producer)

4.71% - 19.25% for South Korean imports (depends on specific producer)</td></tr>
<tr><td>March 22, 2018 to March 21, 2019</td><td>19.3%</td><td>March 22, 2018 to March 21, 2019</td><td>12.4%</td><td>Jun 15, 2018 to Jun 14, 2019</td><td>418,747</td><td>19%</td></tr>
<tr><td>March 22, 2019 to March 21, 2020</td><td>17.3%</td><td>March 22, 2019 to March 21, 2020</td><td>10.9%</td><td>Jun 15, 2019 to Jun 14, 2020</td><td>460,622</td><td>19%</td></tr>
<tr><td>March 22, 2020 onwards</td><td>0.0%</td><td>March 22, 2020 onwards</td><td>0.0%</td><td>Jun 15, 2020 onwards</td><td>0</td><td>0</td></tr>
<tr><td>Valid period</td><td colspan="4">August 2, 2016 to March 21, 2020</td><td>April 14, 2017 to April 13, 2022</td><td colspan="3">Jun 15, 2017 to Jun 14, 2020</td><td>October 24, 2019 to October 23, 2024</td></tr>
</table>

Source: MoIT, VCSC compilation

Nevertheless, we reiterate to note downside risks to our positive view on HPG.

As HPG is still a commodity-linked stock, the most obvious risk to it is commodity prices, or specifically the spread between HPG's selling prices and its iron ore input prices. As discussed above, global steel producers experienced a strong margin compression in 2019 due to unexpected iron ore supply disruptions from Vale, Rio Tinto, and BHP while HPG tries to gain market share through its pricing strategy — which we believe is only a short-term compromise for a long-term benefit. Other notable risks include threats from higher-than-expected Chinese imports and the possible expansion of the Formosa Ha Tinh Steel Complex (FHS) into construction steel. FHS's current designed capacity is seven million tons per annum with the majority of capacity to produce HRC. According to VSA data, FHS sold in total 4.1 million tons of HRC and 658,000 tons of wire-rod in 2019.

Valuation

We continue to use a combination of the DCF (70% weighting) and P/E (30% weighting) methodologies to derive a target price for HPG of VND33,500 per share, which 3% lower than our previous target price.

1. The DCF-derived fair price is lower than our last update report mainly because we trim our 2020F NPAT-MI by 5% amid our own expectation of slow-moving domestic construction activities in Q1 2020 due to the recent coronavirus outbreak.
2. The P/E-derived fair price in this report is lower compared to our last report due to a lower 2020F EPS of VND2,881 vs VND3,025 previously.

Figure 15: Valuation summary

Valuation method	Fair price	Weight	(VND/share)
DCF	37,300	70%	26,200
Target 2020 P/E of 8.5x	24,500	30%	7,300
Target price			**33,500**
2020F P/E at Target price			11.6x

Source: VCSC

Discounted cash flow (DCF)

We continue to apply a five-year DCF valuation, terminal growth rate of 2% and WACC of 12.6%. We are forecasting a 2019-2024F CAGR of 15.7% for HPG's NPAT-MI.

Figure 16: Discounted cash flow

Assumptions	2020F	2021F	2022F	2023F	2024F
EBIT (VND bn)	11,629	14,097	15,509	16,928	18,730
- Tax	-1,744	-2,115	-2,326	-2,539	-2,810
+ Depreciation	5,049	6,957	7,174	7,392	7,172
- Capex	-4,481	-2,242	-2,251	-2,261	-2,449
- Working cap increase	953	-5,515	-4,693	-5,048	-4,964
Free Cash Flow	**11,406**	**11,183**	**13,413**	**14,472**	**15,681**
Present value of FCF	**10,133**	**8,826**	**9,405**	**9,015**	**8,678**
Total PV of FCF	**10,133**	**18,959**	**28,364**	**37,379**	**46,056**

Cost of Capital	Previous report	Revised
Beta	1.3	1.3
Market Risk Premium %	8.7	8.7
Risk Free Rate %	4.5	4.5
Cost of Equity %	15.8	15.8
Cost of Debt %	10.0	10.0
Corporate Tax Rate %	16.0	16.7
Debt-to-capital ratio %	43.1	43.4
WACC %	**12.6**	**12.6**
Terminal Growth Rate %	2.0	2.0

DCF	VND bn
PV of Free Cash Flow	46,056
PV of Terminal Val	88,694
PV of FCF and TV	**134,750**
Plus: Cash + Short term deposit	5,939
Less: Debt	36,680
Value of Equity	**104,010**
Fully diluted shares (mn)	2,761
DCF value per share (VND)	**37,300**

Source: VCSC

Figure 17: Sensitivity analysis of our target price for HPG in relation to DCF's WACC and terminal growth rate, ceteris paribus

Terminal growth rate %	WACC 12.0%	12.2%	12.4%	12.6%	12.8%	13.0%	13.2%
0.5%	32,000	31,500	30,900	30,400	29,900	29,400	28,900
1.0%	33,100	32,500	31,900	31,300	30,800	30,300	29,800
1.5%	34,200	33,600	33,000	32,400	31,800	31,200	30,700
2.0%	35,500	34,800	34,100	**33,500**	32,800	32,200	31,700
2.5%	36,900	36,100	35,400	34,700	34,000	33,400	32,700
3.0%	38,500	37,600	36,800	36,000	35,300	34,600	33,900
3.5%	40,200	39,300	38,400	37,500	36,700	36,000	35,200

Source: VCSC

Peer P/E multiple

We select leading construction steel producers in Asian countries such as South Korea, China, India and Taiwan to form a comparable universe for HPG. Our selected peer group reported low Q3 2019 earnings results that caused a spike in the peer group median P/E from September-December 2019. These companies reported recoveries in Q4 2019; therefore, the peer group median P/E dove to 9.7x as it is currently. As the peer group median P/E is correcting after Q3 2019's abnormal level, we maintain a target 2020 P/F of 8.5x as in our last update report.

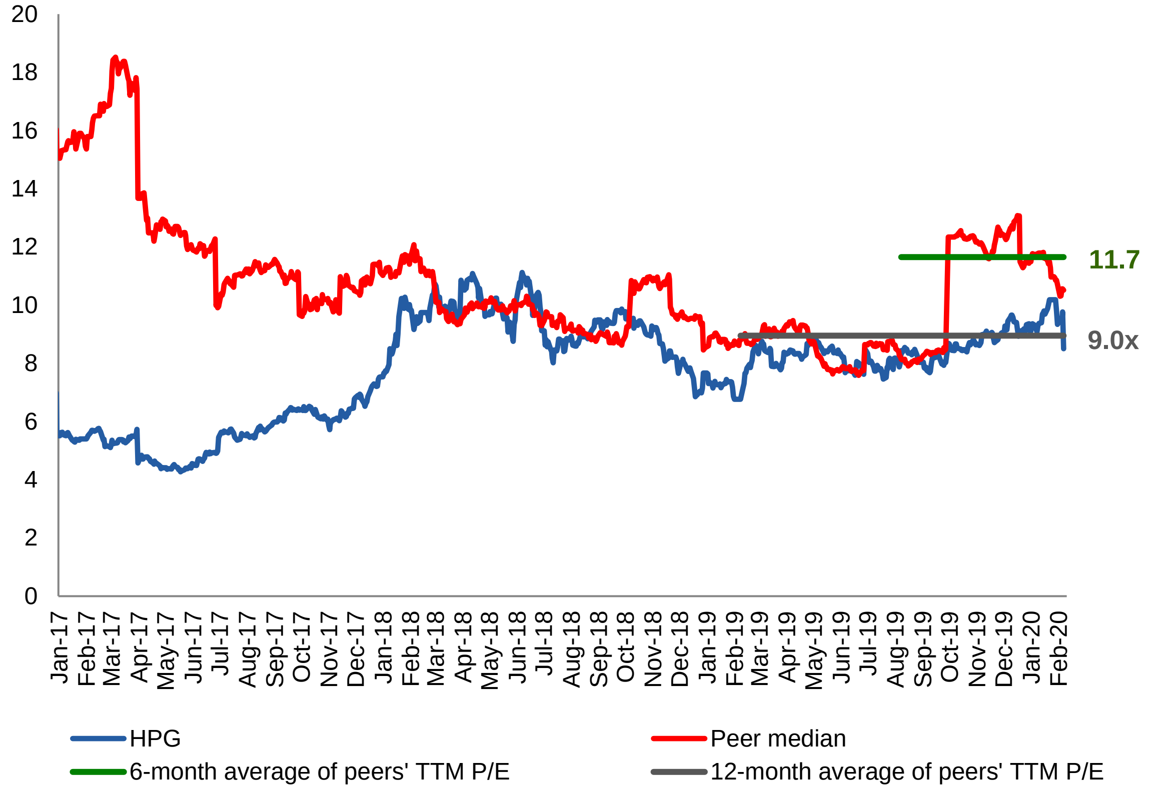
We believe that HPG deserves to trade at least on par with its peers, despite its smaller scale, given HPG's superior profitability (TTM ROE of 17.0% vs 5.8% peer median) and solid growth prospects with NPAT-MI CAGR of 15.7% over 2019-2024F, based on our forecast.

Figure 18: Regional peers

Company	Country	Mkt cap (USD mn)	TTM Net Sales (USD mn)	Y-o-Y (%)	TTM NPAT (USD mn)	Y-o-Y (%)	TTM EBIT margin	TTM EBITDA margin	Net debt/ Equity (%)	ROE (%)	ROA (%)	P/E (x)	LQ P/B (x)
POSCO	South Korea	16,198	55,253	-0.9	1575	8.5	9.7	6.0	20.5	2.0	1.1	9.7	0.4
China Steel Corp	Taiwan	12,277	12,458	-0.2	497	-37.6	23.7	5.6	58.6	5.0	2.3	23.7	1.2
Jsw Steel	India	9,451	11,803	17.7	1093	22.9	8.8	18.1	120.2	24.3	7.4	8.8	1.9
NMDC	India	4,846	1,739	4.6	661	21.3	7.5	54.7	-16.3	18.3	15.8	7.5	1.4
Hesteel Co	China	3,392	18,130	10.6	297	-31.9	11.8	5.8	169.1	4.3	1.0	11.8	0.5
Hyundai Steel	South Korea	3,339	17,608	-1.3	15	-95.7	N/M	1.6	54.6	1.0	0.5	N/M	0.2
Fosun Intl	China	3,053	19,680	41.0	2074	0.0	5.9	19.3	13.7	13.2	2.3	5.9	0.7
Maanshan Iron & Steel Co	China	2,920	11,115	-8.5	265	-73.8	11.4	3.9	41.3	6.6	2.4	11.4	0.8
Average		6,934	18,473	7.9	810	-23.3	11.3	14.4	57.7	9.3	4.1	11.3	0.9
Median		4,119	15,033	2.2	579	-15.9	9.7	5.9	48.0	5.8	2.3	9.7	0.8
Hoa Phat Group	**Vietnam**	**2,857**	**2,768**	**14.0**	**326**	**-12.4**	**15.3**	**19.4**	**64.3**	**17.0**	**8.3**	**9.4**	**1.4**

Source: Bloomberg, VCSC

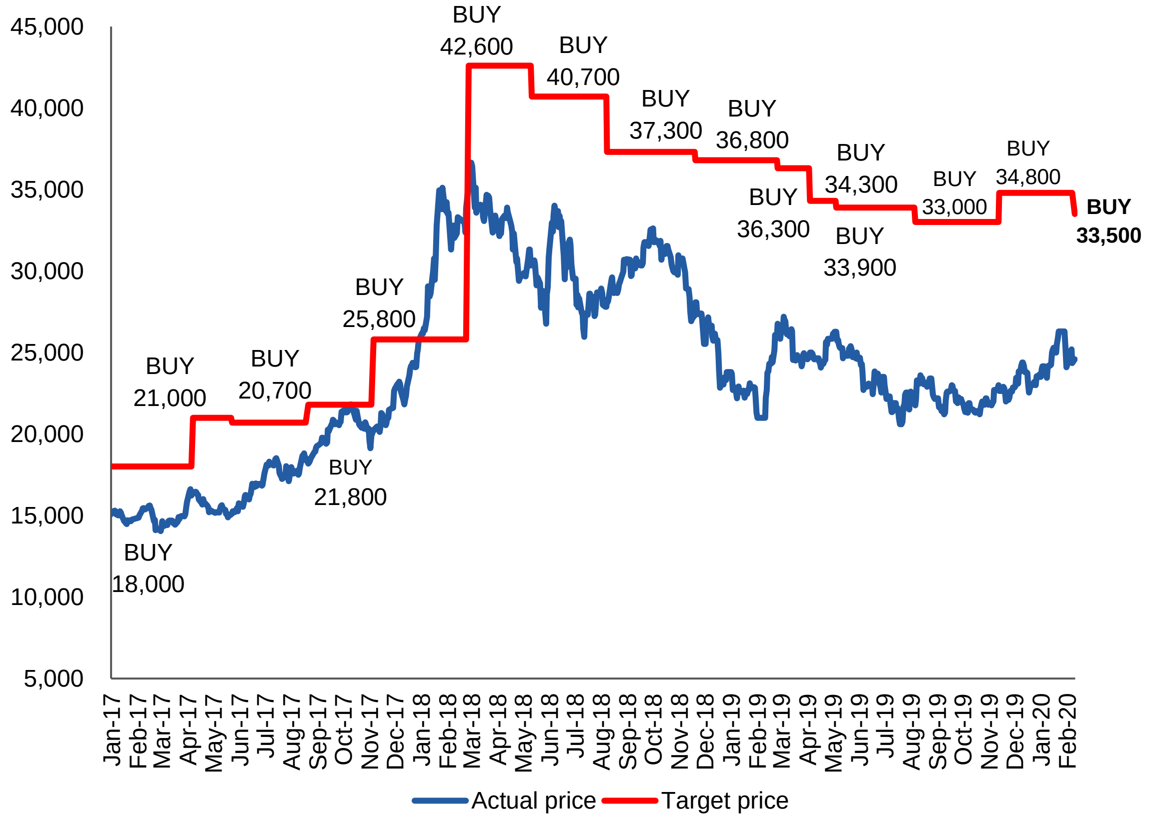
Figure 19: Historical Price-to-Earnings Ratio (P/E) of HPG vs peers



Source: Bloomberg, VCSC

Recommendation history

Figure 20: Historical VCSC target price vs share price (VND/share)



Source: Bloomberg, VCSC. Note: Historical target prices adjusted for changes in shares outstanding.

Financial statements

P&L (VND bn)	2019	2020F	2021F	2022F
Revenue	**63,658**	**78,857**	**95,859**	**107,035**
COGS	-52,473	-65,357	-79,501	-88,971
Gross Profit	**11,185**	**13,500**	**16,358**	**18,064**
Sales & Marketing exp	-873	-1,240	-1,493	-1,699
General & Admin exp	-569	-631	-767	-856
Operating Profit	**9,743**	**11,629**	**14,097**	**15,509**
Financial income	471	608	593	624
Financial expenses	-1,182	-2,300	-2,439	-2,099
- o/w interest expense	-937	-2,051	-2,193	-1,874
Associates	-1	-1	-1	-1
Net other income/(loss)	66	66	66	66
Profit before Tax	**9,097**	**10,002**	**12,316**	**14,098**
Income Tax	-1,518	-1,500	-1,847	-2,115
NPAT before MI	**7,578**	**8,501**	**10,468**	**11,983**
Minority Interest	-71	-38	-47	-53
NPAT less MI, reported	**7,508**	**8,463**	**10,422**	**11,930**
NPAT less MI, adjusted	**7,508**	**8,463**	**10,422**	**11,930**
EBITDA	12,381	16,678	21,054	22,683
EPS reported, VND	2,541	2,881	3,548	4,062
EPS adjusted, VND	2,541	2,881	3,548	4,062
EPS fully diluted, VND	2,541	2,881	3,548	4,062
DPS, VND	0	0	2,000	2,300
DPS/EPS (%)	0%	0%	56%	57%

RATIOS	2019	2020F	2021F	2022F
Growth				
Revenue growth	14.0%	23.9%	21.6%	11.7%
Op profit (EBIT) growth	-7.6%	19.4%	21.2%	10.0%
PBT growth	-9.7%	9.9%	23.1%	14.5%
EPS growth, adjusted	-14.3%	13.4%	23.1%	14.5%
Profitability				
Gross Profit Margin	17.6%	17.1%	17.1%	16.9%
Op Profit, (EBIT) Margin	15.3%	14.7%	14.7%	14.5%
EBITDA Margin	19.4%	21.2%	22.0%	21.2%
NPAT-MI Margin, adj,	11.8%	10.7%	10.9%	11.1%
ROE	17.0%	16.3%	18.0%	19.0%
ROA	8.3%	8.1%	9.7%	11.0%
Efficiency				
Days Inventory On Hand	116.6	114.2	111.8	120.8
Days Accts, Receivable	14.1	13.7	13.9	14.9
Days Accts, Payable	51.8	46.2	51.5	51.2
Cash Conversion Days	78.9	81.7	74.2	84.5
Liquidity				
Current Ratio x	1.1	1.4	1.7	1.9
Quick Ratio x	0.4	0.6	0.6	0.6
Cash Ratio x	0.2	0.3	0.2	0.3
Debt / Assets	36.0%	27.4%	23.0%	18.5%
Debt / Capital	43.4%	34.3%	29.3%	23.8%
Net Debt / Equity	64.3%	38.0%	29.3%	19.1%
Interest Coverage x	10.7	5.9	6.6	8.5

B/S (VND bn)	2019	2020F	2021F	2022F
Cash & equivalents	4,565	6,601	5,950	6,507
ST investment	1,374	1,374	1,374	1,374
Accounts receivables	2,663	3,241	4,071	4,692
Inventories	19,412	21,487	27,226	31,688
Other current assets	2,458	3,044	3,701	4,132
Total Current assets	**30,472**	**35,748**	**42,323**	**48,393**
Fix assets, gross	82,243	86,724	88,966	91,217
- Depreciation	-12,982	-18,031	-24,987	-32,161
Fix assets, net	69,261	68,693	63,978	59,056
LT investment	26	26	26	26
LT assets other	2,032	2,032	2,032	2,032
Total LT assets	**71,319**	**70,751**	**66,036**	**61,113**
Total Assets	**101,791**	**106,499**	**108,358**	**109,506**
Accounts payable	6,178	10,370	12,081	12,903
Short-term debt	16,838	10,457	9,540	8,897
Other ST liabilities	3,982	3,982	3,982	3,982
Total current liabilities	26,998	24,810	25,603	25,782
Long term debt	19,842	18,707	15,405	11,404
Other LT liabilities	7,163	7,163	7,163	7,163
Total Liabilities	**54,003**	**50,680**	**48,172**	**44,349**
Preferred Equity	0	0	0	0
Paid in capital	27,611	27,611	27,611	27,611
Share premium	3,212	3,212	3,212	3,212
Retained earnings	15,858	23,852	28,173	33,090
Other equity	924	924	924	924
Minority interest	183	221	267	321
Total equity	**47,788**	**55,819**	**60,187**	**65,157**
Liabilities & equity	**101,791**	**106,499**	**108,358**	**109,506**
Y/E shares out, mn	2,761	2,761	2,761	2,761

CASH FLOW (VND bn)	2019	2020F	2021F	2022F
Beginning Cash Balance	**2,516**	**4,565**	**6,601**	**5,950**
Net Income	7,578	8,501	10,468	11,983
Dep, & amortization	2,638	5,049	6,957	7,174
Chge in Working Cap	-6,445	953	-5,515	-4,693
Other adjustments	4,583	-508	-625	-716
Cash from Operations	**8,354**	**13,995**	**11,285**	**13,749**
Capital Expenditures, net	-21,622	-4,481	-2,242	-2,251
Investments, net	2,901	0	0	0
Cash from Investments	**-18,698**	**-4,481**	**-2,242**	**-2,251**
Dividends Paid	0	0	-5,522	-6,350
∆ in Share Capital	0	0	0	0
∆ in ST debt	5,343	-6,381	-917	-643
∆ in LT debt	7,031	-1,135	-3,301	-4,001
Other financing C/F	19	38	47	53
Cash from Financing	**12,393**	**-7,478**	**-9,694**	**-10,942**
Net Change in Cash	**2,049**	**2,036**	**-651**	**556**
Ending Cash Balance	**4,565**	**6,601**	**5,950**	**6,507**

Source: Company's financial statements, VCSC forecasts

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Stock ratings are set based on projected total shareholder return (TSR), defined as (target price – current price)/current price + dividend yield, and are not related to market performance.

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BUY	If the projected TSR is 20% or higher
OUTPERFORM	If the projected TSR is between 10% and 20%
MARKET PERFORM	If the projected TSR is between -10% and 10%
UNDERPERFORM	If the projected TSR is between -10% and -20%
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Target prices are generally based on the analyst's assessment of the stock's fair value over a 12-month horizon. However, the target price may differ from the analyst's fair value if the analyst believes that the market will not price the stock in line with assessed fair value over the specified time horizon.

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