

STEEL INDUSTRY OUTLOOK 2020

Awaiting steel industry revival

December 23, 2019

Mirae Asset Securities (Vietnam) LLC

Thien Nguyen – Tel: +84 28 3910 2222 – Ext: 148

December 2019

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Oversupply and slower growth rate

- ❑ The high growth rate in steel consumption was maintained (CAGR 2015-2018: 23%):
 - Construction steel CAGR 2015–2018: 15.5% YoY
 - Steel pipe CAGR 2015–2018: 18.7% YoY
 - Steel coat CAGR 2015–2018: 21.4% YoY
 - Steel coil CAGR 2015–2018: 49.1% YoY
- ❑ Lower growth in 10M19:
 - Steel production: 20,976mn tonnes (+4.6% YoY)
 - Steel consumption: 19,168mn tonnes (+6% YoY)
 - Both steel production and consumption declined, due to fewer real estate project starts.
- ❑ Construction steel accounted for around 50% of Vietnam’s total steel consumption. Steel coil is increasing its share, thanks to expansions of the two largest hot-rolled coil (HRC) producers: Formosa Ha Tinh Steel (FHS) and Hoa Phat Group (HPG)
 - => Galvanized steel manufacturers will be less dependent on HRC imports going forward, reducing exchange rate risks.

Figure 1. Vietnam’s steel production and consumption

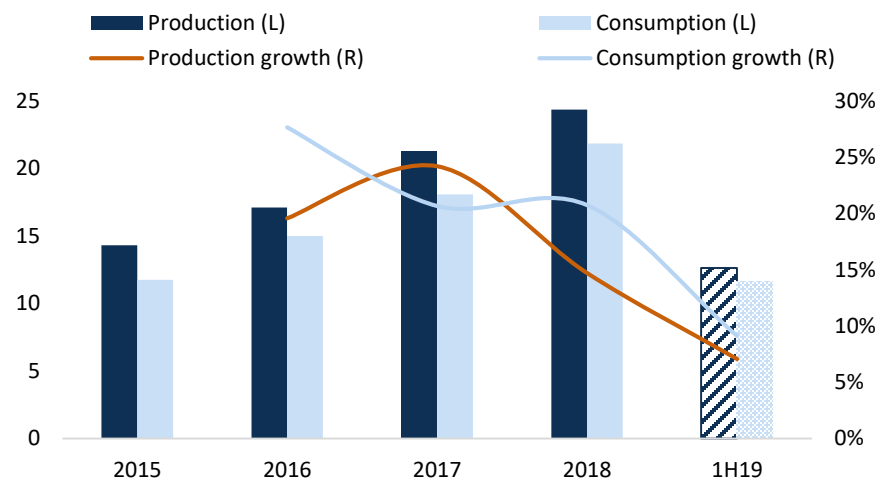
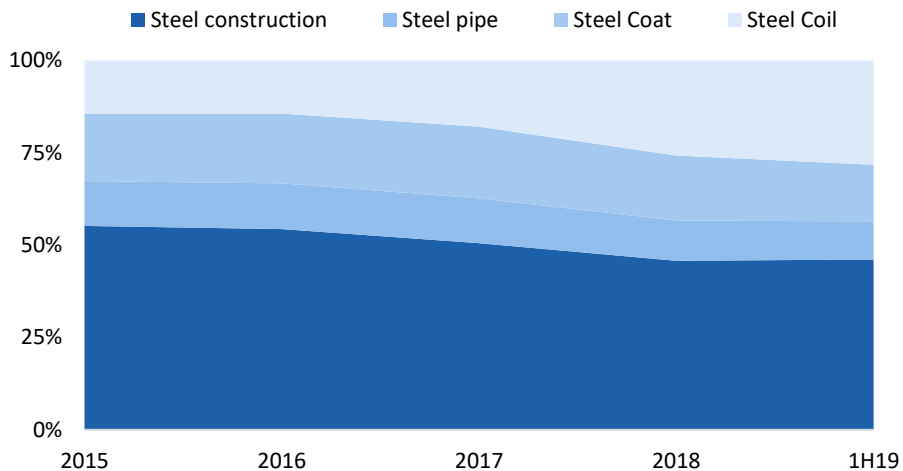


Figure 2. Steel consumption by product



Race to expand capacity



Table 1: Capacity of Vietnam's four biggest domestic steel companies (tonnes)

Company	Product	2017	2018	2019 – 2020F
Hoa Phat Group JSC (HPG VN)	Long steel	2,000,000	2,000,000	4,000,000
	Hot rolled coil (HRC)	-	-	2,000,000
	Galvanized steel	-	400,000	400,000
	Steel pipe	-	600,000	600,000
Hoa Sen Group (HSG VN)	Cold rolled coil (CRC)	1,680,000	2,030,000	2,030,000
	Galvanized steel	2,280,000	2,330,000	2,330,000
	Color-coating	660,000	690,000	690,000
	Steel pipe	751,000	869,000	869,000
Nam Kim Steel JSC (NKG VN)	Cold rolled coil (CRC)	1,000,000	1,000,000	1,000,000
	Galvanized steel	870,000	1,220,000	1,220,000
	Color-coating	276,000	276,000	276,000
	Steel pipe	300,000	300,000	300,000
Pomina Steel Corporation (POM VN)	Long steel	1,000,000	1,500,000	1,500,000
	Color-coating & galvanized steel	-	200,000	600,000

The most noteworthy capacity expansions:

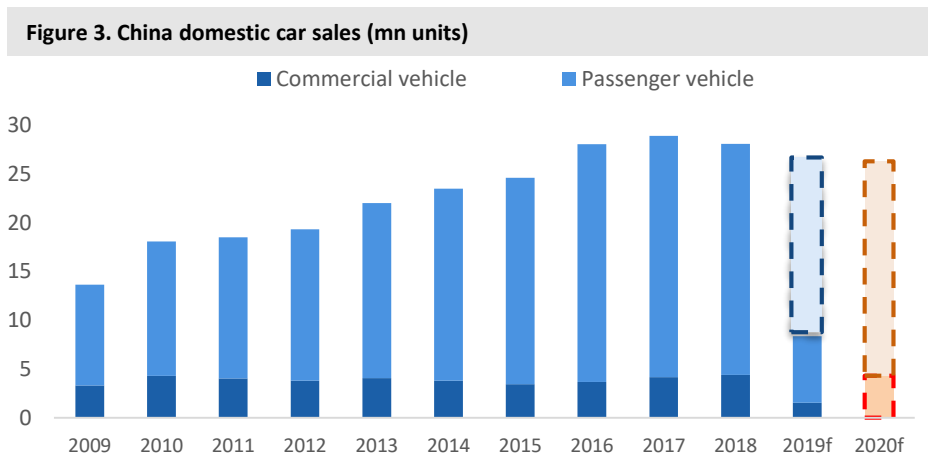
- Formosa Ha Tinh Steel (FHS): Phase 1 (2016 – 2020), running two blast furnaces, products include construction steel and HRC, estimated capacity of 3.1mn tonnes; Phase 2 (2021 – 2030), running all four blast furnaces, with total capacity of 22.5 mn tonnes
- Dung Quat Complex-Hoa Phat Group (HPG): Phase 1 (2017 – 2021), running two blast furnaces, with construction steel capacity of 2mn tonnes; Phase 2 (2021 – 2023), running all four blast furnaces, adding an additional 2mn tonnes of HRC

Protectionism: Everyone plays the tariff card

Domestic demand threatened by imported steel: Tariffs are the best option

- The US has imposed 25% tariffs on steel from China, Russia, Korea, Argentina, Australia, and Brazil.
- To protect domestic industries, countries have imposed tariffs on imported steel that range from 5% to 50%.
- China continues to reduce its capacity to maintain product prices, as well as reduce air pollution.
- However, we estimate actual cut-down capacity in FY19-20 will be only 12.5MT of crude steel (~1.5% of China's total production in 2018).
- Together with weaker vehicle demand, China's steel companies imply they will focus on exports of crude steel to offset their losses in US market.
- Vietnam has extended tariffs on imported semi-finished products through FY20, which will bolster finished steel products' domestic competitive advantage.

Product	Duty rates imposed	Applicable duration
Stainless cold-rolled coil	China: 6.64–6.87%	May 2016–Oct. 2019
	Indonesia: 3.07–10.71%	
	Malaysia: 10.71%	
	Taiwan: 13.79–37.29%	
Billets and long steel	Billets: 17.3% Long steel: 10.9%	March 2016–Mar. 2020
Galvanized/ galvalume sheet	China: 3.17–38.34% Korea: 7.02–19%	Sept. 2016–Sept. 2022



	Newly added	Capacity closure	Net removal
2019	50.2	-51	-0.8
2020	92.7	-104.4	-11.7
Sum	142.9	-155.38	-12.5

Steel exports in FY19 to be flat

Trade war establishes two new trends negatively affecting local steel industry:

- Tariff hikes on steel exporting countries: 0%–5% (old tariffs) vs. 7%–150% (new tariffs).
- Developed countries' GDP growth decelerates from expected 1.5%–2% to only 0%–1% (European countries).

Headwinds ahead: Real estate and construction materials will be the first victims

- Growth in Vietnam's steel exports outperformed expectations, with growth of 5.6% in 9M19 vs. 4.6% in 9M18 (Page 3, Fig 1, **Steel Industry Outlook 2020, December 23, 2019**).
- However, HRC of Formosa Ha Tinh accounts for approximately 2mn MT (41% export market share). Excluding Formosa, domestic steel companies exported revenue is 2.862mn MT (-38% YoY compared with adjusted 9M18 sales).
- Headwinds will first hit galvanized and colored-coat producers, as domestic demand is currently oversupplied.

Figure 5. Vietnam export volume

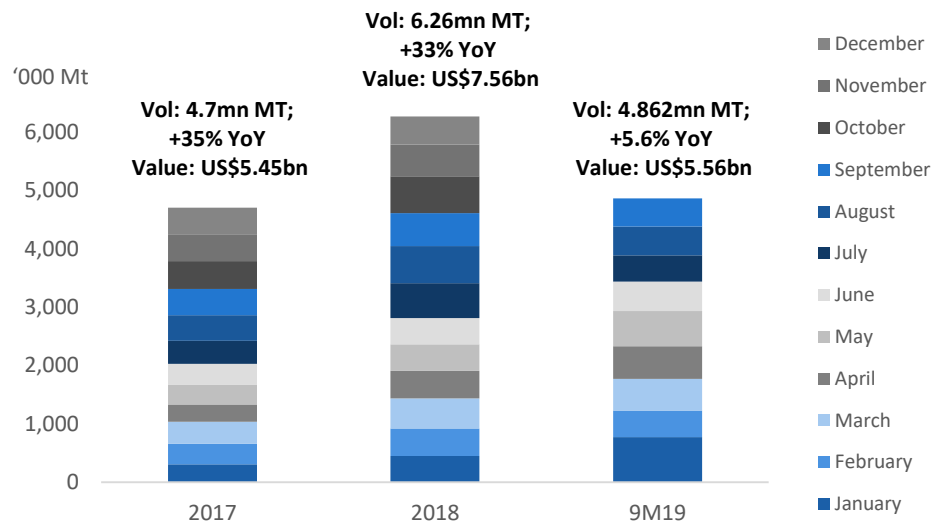
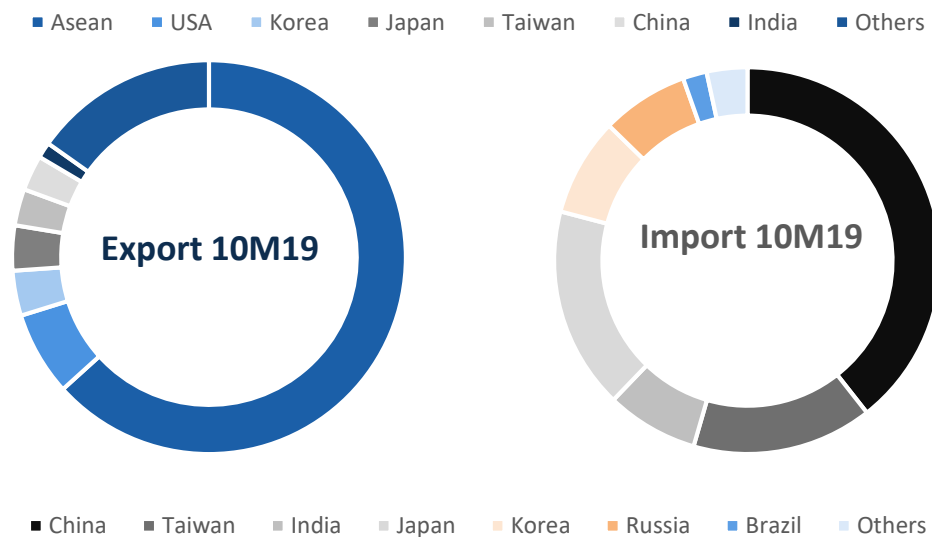


Figure 6. Vietnam imports vs. exports 10M19



Focus on gaining domestic market share

When export market becomes less attractive, steel manufacturers try to increase domestic market share

- Color-coated steel: Hoa Sen Group, Nam Kim Group, Dai Thien Loc, and Dong A have postponed their new plants in Binh Thuan and Ba Ria-Vung Tau provinces to retain enough cashflow for daily expenditures.
- Construction steel: Producers like Hoa Phat Group, Pomina, and Vinakyoei are not affected by export tariffs. Their most loyal customers are domestic buyers within specified territories. Hoa Phat dominates the construction steel market in the north. Central and southern Vietnam belong to POSCO SS Vina, Pomina, Vinakyoei, and others.
- However, HPG's Dung Quat Complex (DQCS) may change the rank of players in the construction steel market when its first two flash furnaces are able to provide 2mn MT of long steel. DQCS can produce HRC, as well as receive large-capacity ships, thanks to its deep seaport. Consequently, the price of HPG's construction steel in the south will be 7%-10% cheaper per tonne than its competitors (app. US\$50-70/MT).
- Therefore, in FY20, we forecast HPG's market share of construction steel to rise by 35%-40% (vs. 28% in FY19)

Figure 5. Market share of construction steel

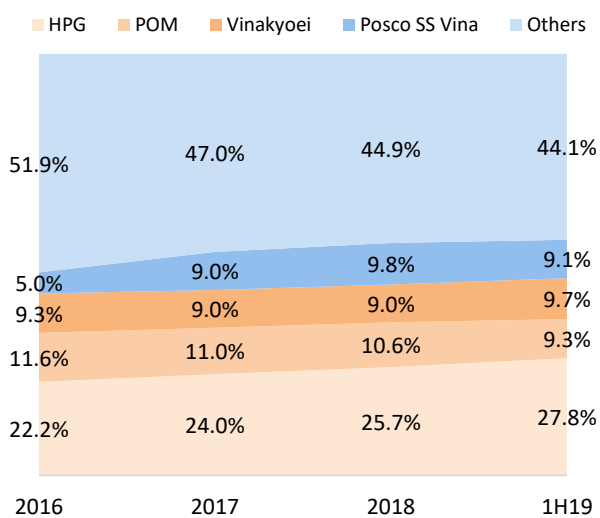


Figure 6. Market share of pipe

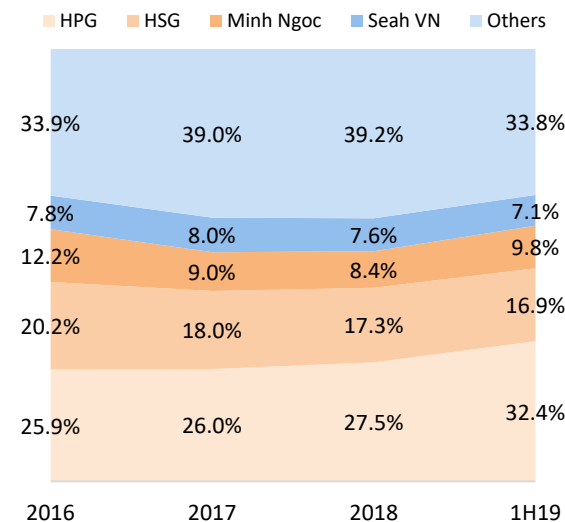
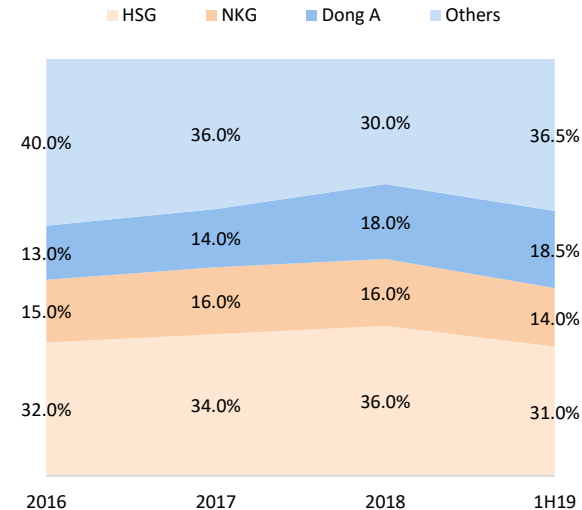
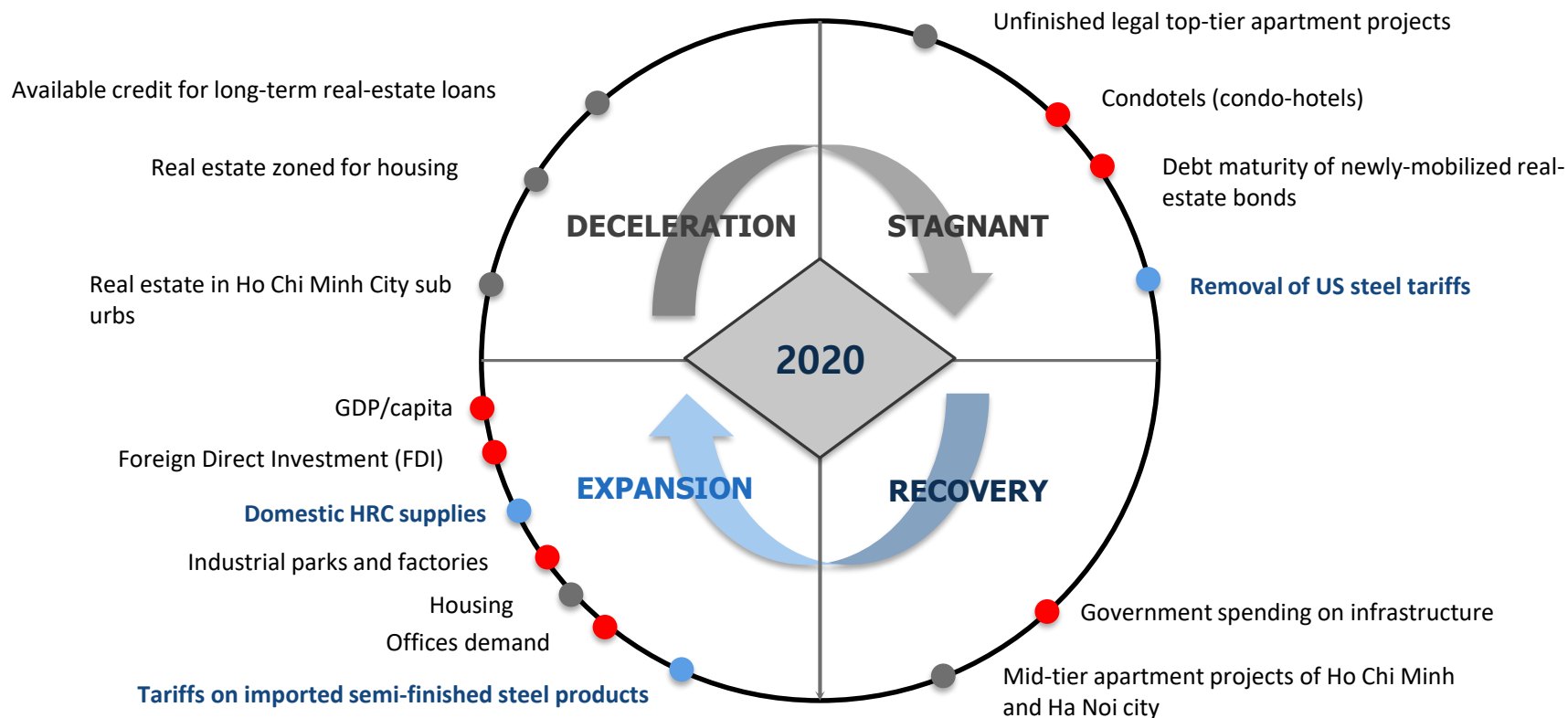


Figure 7. Market share of galvanized steel



Outlook of real estate and macroeconomic factors

Figure 8. Major factors affecting Vietnam's steel industry



We adjusted the correlations between the steel industry and real estate/macroeconomic conditions, with 43% of categories indicating slower steel market demand, despite expectations for 6.8%–7% GDP growth in FY20. Our forecast indicates:

1. Low liquidity for the real estate market

2. Low competitive advantage for export products, due to peak tariffs

3. Tightening of regulations for real estate projects

4. Tightening credit for developers, as well as limits to new real-estate bond issues

Real estate will return to organic growth

Forecast for tighter credit for real estate to maintain stable GDP growth

- Real estate and infrastructure have been the two main growth drivers of the steel industry for the past 20 years.
- However, the real-estate boom of 2015–1H18 created conditions for a potential housing bubble.
- The State Bank of Vietnam (SBV) has moved to tighten credit for home loans.
- Decree 22/2019/TT-NHNN lowers the proportion of long-term loans to 30%/total loans in 2022 and directs banks to offer preferential interest rates for manufacturers.

⇒ **The real estate market has rapidly cooled down, and we expect its growth to remain low for at least one more year.**

⇒ **We forecast steel industry growth of 10% in FY20, higher than the 4.5% organic growth of the real estate market (Fig. 12–13, Page 9, Steel Industry Outlook 2020, December 23, 2019), thanks to new investment for infrastructure and higher disposable household income.**

Figure 9. Forecast credit growth in FY19–FY20

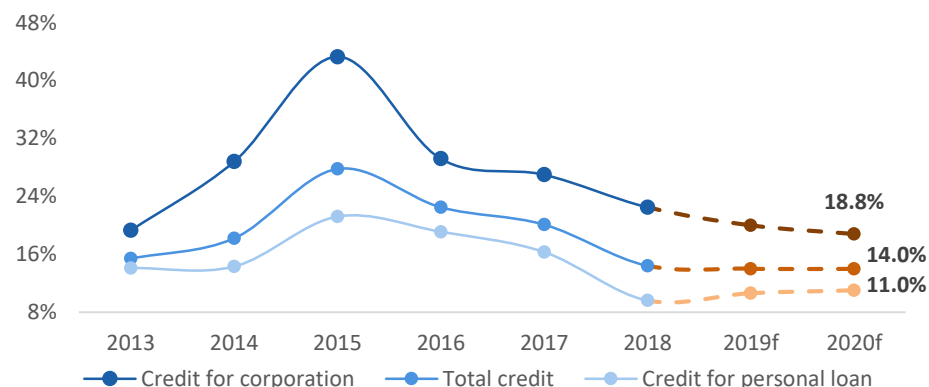


Figure 10. Proportion of fixing home and consumer loans/total loans (US\$)

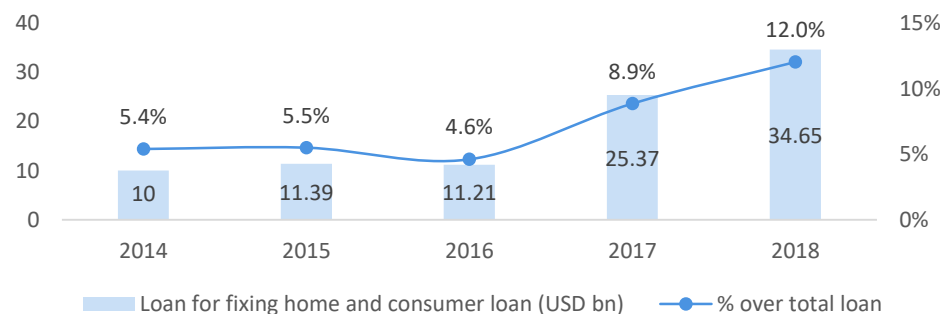
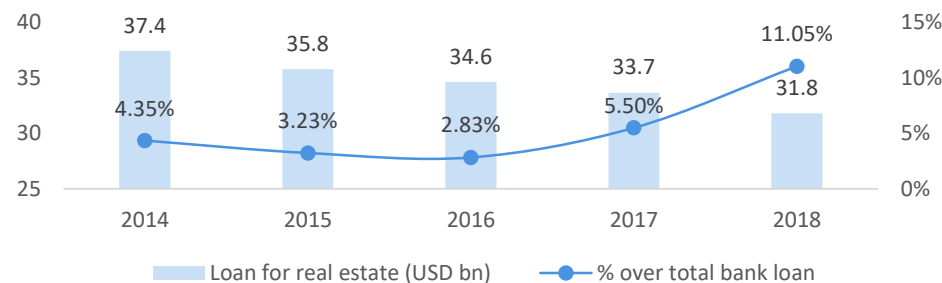


Figure 11. Proportion of real estate loans/total loans (US\$)



Forecast organic growth of steel vs. real estate for FY19–FY21

Figure 12. Forecast revenue growth and gross margin amid stagnant real-estate market

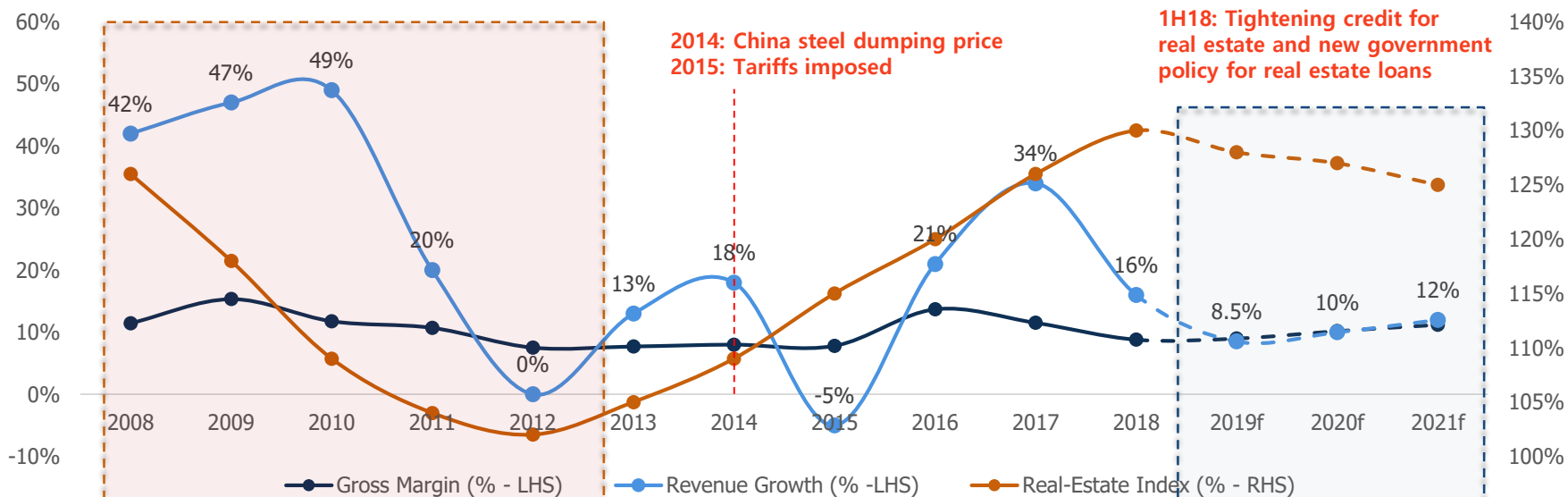
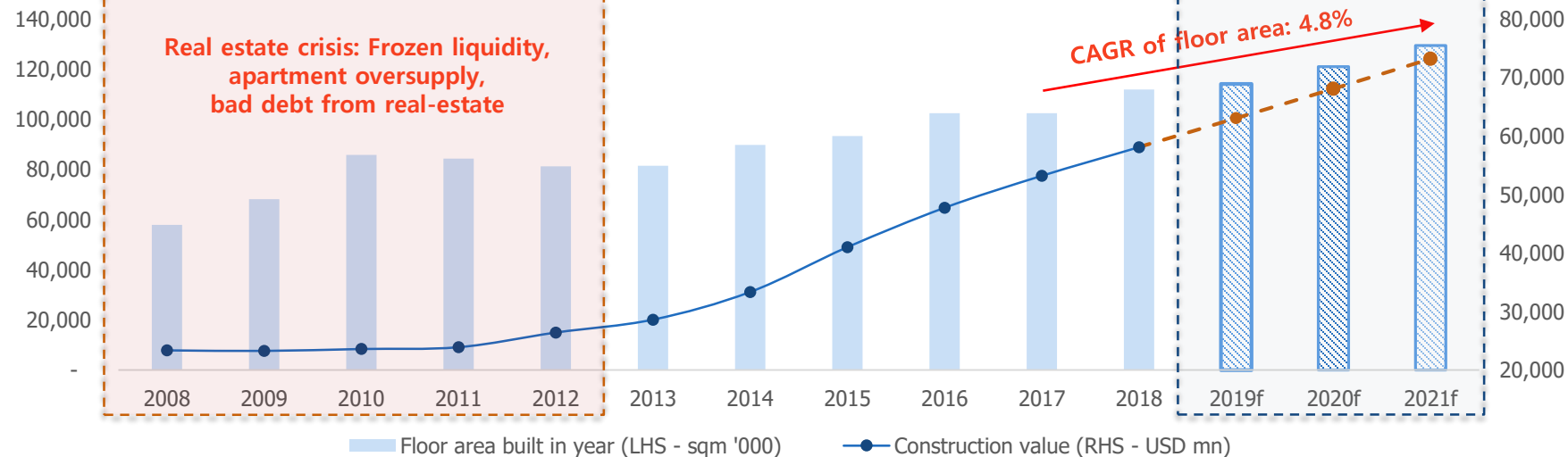


Figure 13. Correlation between steel industry's financial results and real estate prices [USD→US\$]



Exposure to fluctuations in raw material prices

Softer HRC prices to bring headwinds

- Currently, Shanghai HRC is trading at US\$492/MT, down by 43% compared with US\$865/MT on 18 Sept.
- Profit margins of color-coated steel producers, such as HSG, DTL, and NKG, should see recovery in FY20.
- However, we forecast only a slight improvement in profit margin, as domestic demand is weak, due to tightening of credit for real estate.
- For construction steel manufacturers, raw material costs have decreased 5%–15%; this should help them to improve gross margin by 1%–2% to reach 8.5%–10%.

Figure 14. Price movement of HRC, iron ore, coking coal and steel scrap (US\$/MT)

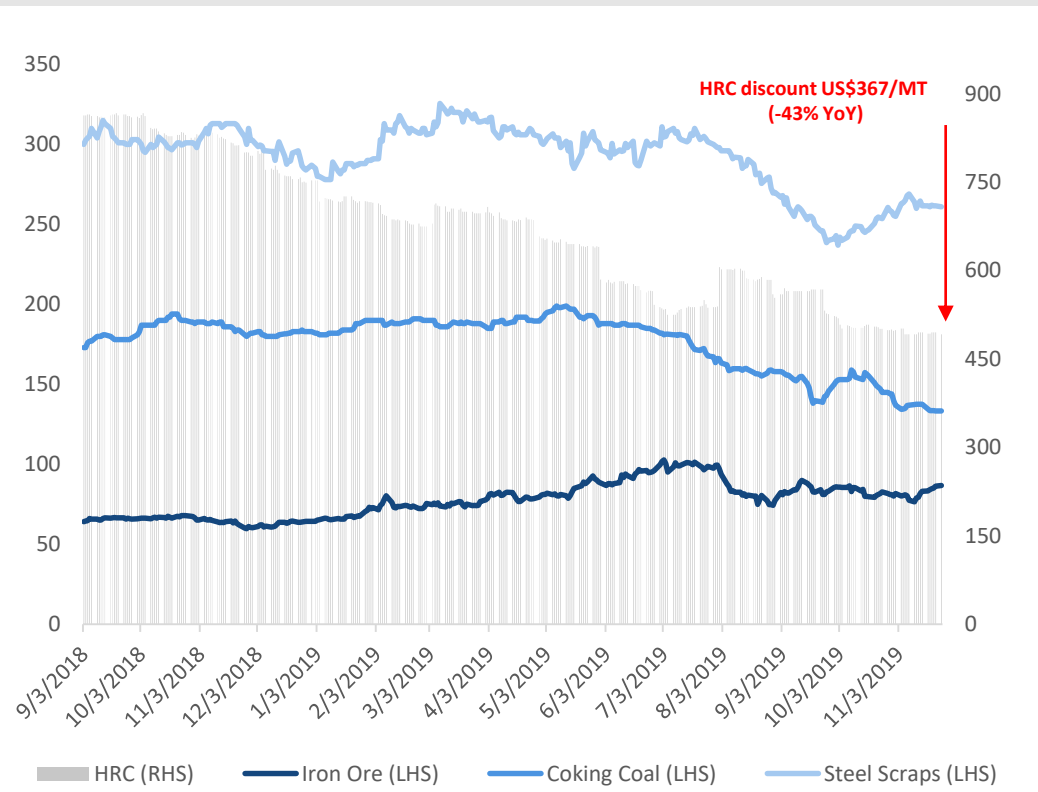
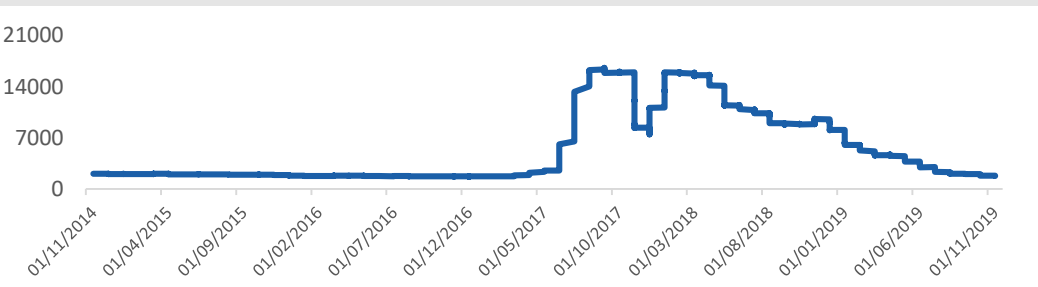


Figure 15. Price movement of graphite electrodes



Exposure to fluctuation in electricity prices

Steel manufacturers that use EAF technology will be vulnerable, due to higher electricity prices:

- For domestic steel manufacturers, higher electricity prices are a significant risk.
- Electricity accounts for 20% of EAF's cost structure. Therefore, we calculate that an 8% increase in price of electricity would result in a decline of 1.6%–2% in gross margin for steel manufacturers that use EAF technology.
- We expect Pomina's net profit after tax (NPAT) to continue to fare poorly (<5% in FY20) unless it changes its technology.
- The gross margins of other manufacturers of galvanized or color-coated steel will be less affected, due to the decline in HRC prices (Fig 16 – Page 10 – **Steel Industry Outlook 2020, December 23, 2019**)

Figure 16. Movement of electricity price

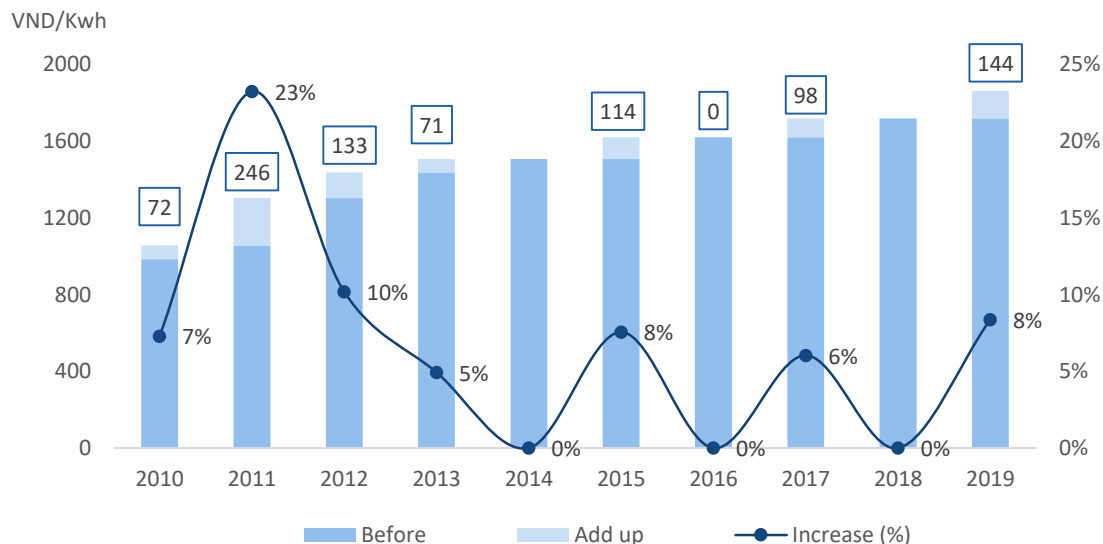


Figure 17. Cost structure of EAF

■ Steel scrap ■ Electricity ■ Others

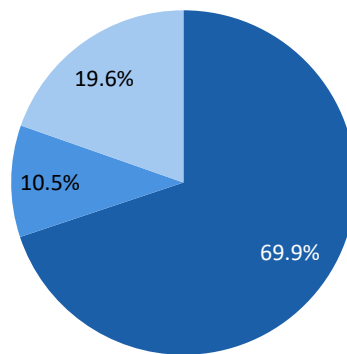
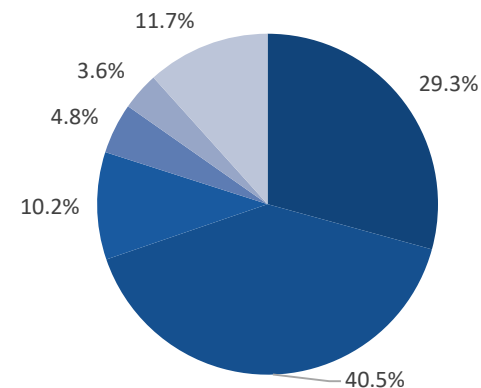


Figure 18. Cost structure of BOF technology

■ Iron ore ■ Coal ■ Steel scrap
■ Industrial gases ■ Electricity ■ Others



Margins may narrow on harsh competition and interest burden

Steel industry profit margins should continue to recover in FY20, after 20% correction in raw material prices

- The use of loans to expand capacity over the past few years may lead to oversupply in the short term, while rising interest expenses could have a negative impact on balance sheets. Companies that are expanding their manufacturing capability and have strong balance sheets, such as HPG, should continue to grab market share.
- After a year of poor cash flow, many steel companies have increased their short-term debt to supplement working capital.
- If raw material prices remain stable in FY20, the steel industry's average debt-to-asset ratio should return to normal levels of 45%-48% (currently 60%).
- The industry's NPAT margin should improve by at least 2%–3%, thanks to cheaper cost of goods sold and supplementary HRC supplies from HPG and FHS.

Figure 19. Net profit margin

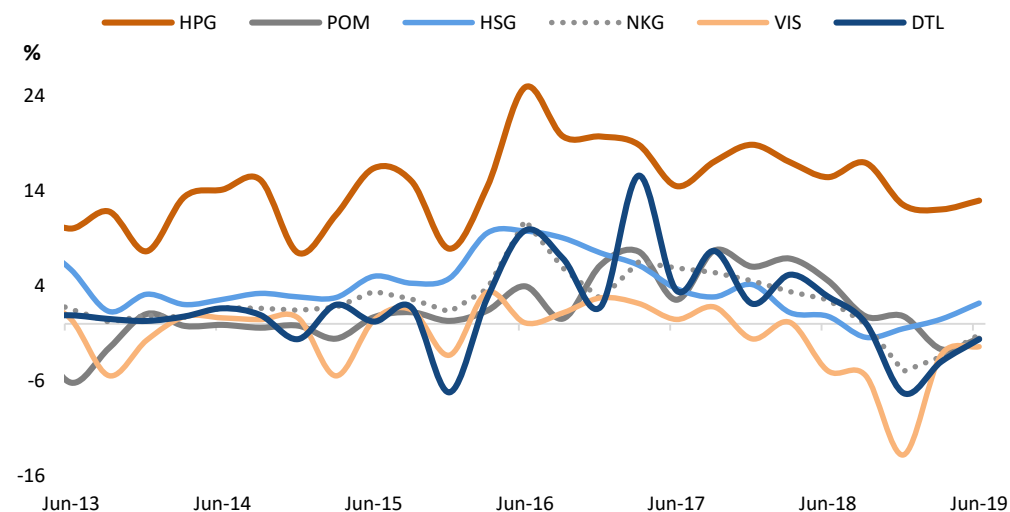
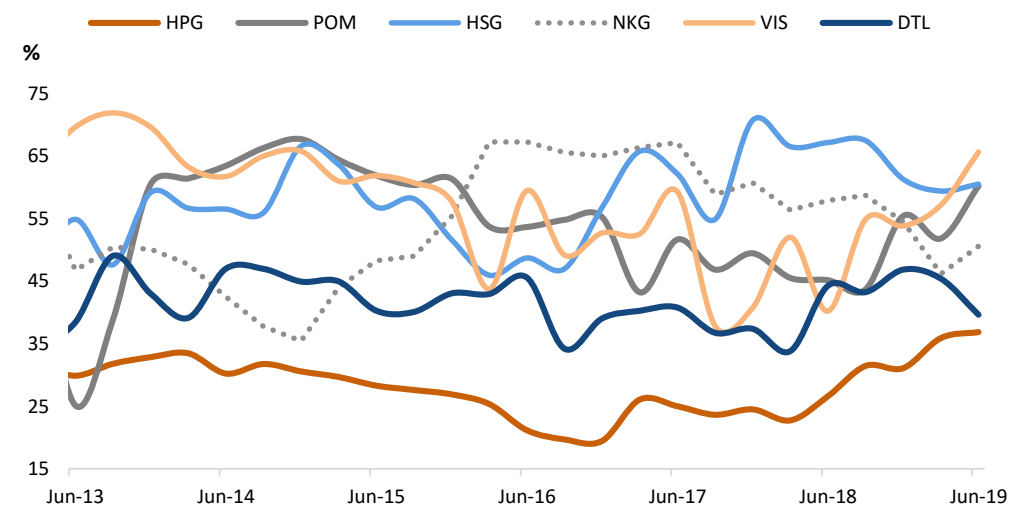


Figure 20. Debt-to-total-asset ratio



Steel industry occupies about 1.8% of total market capitalization

Vietnam's steel market remains undervalued compared with other Asian countries, at EV/EBITDA 5.5x, amid market cap curtailment

- In our view, the reason why Vietnam's steel market is undervalued is that domestic manufacturers are too sensitive to fluctuations in raw material prices.
- Moreover, Vietnam's steel market suffers from a trade deficit, thus limiting the value chain in steel. Producers such as NKG, HSG, DTL, and Pomina all depend on imported materials, rendering them unable to exploit a full value chain.
- However, Vietnam's steel industry has maintained very good ROE amid trade war escalation (6.8% vs. 7% average for Asia).
- In our view, in FY20, when DQCP starts to provide HRC, and Formosa Ha Tinh completes its expansion of additional 2mn MT of HRC, Vietnam's steel industry will take advantage of cheaper input materials.

Figure 21. Steel industry market cap/total market cap (US\$)

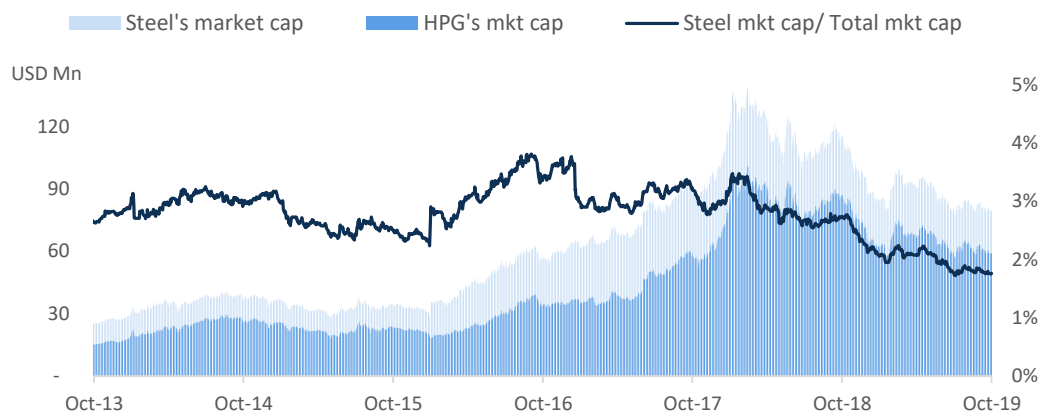
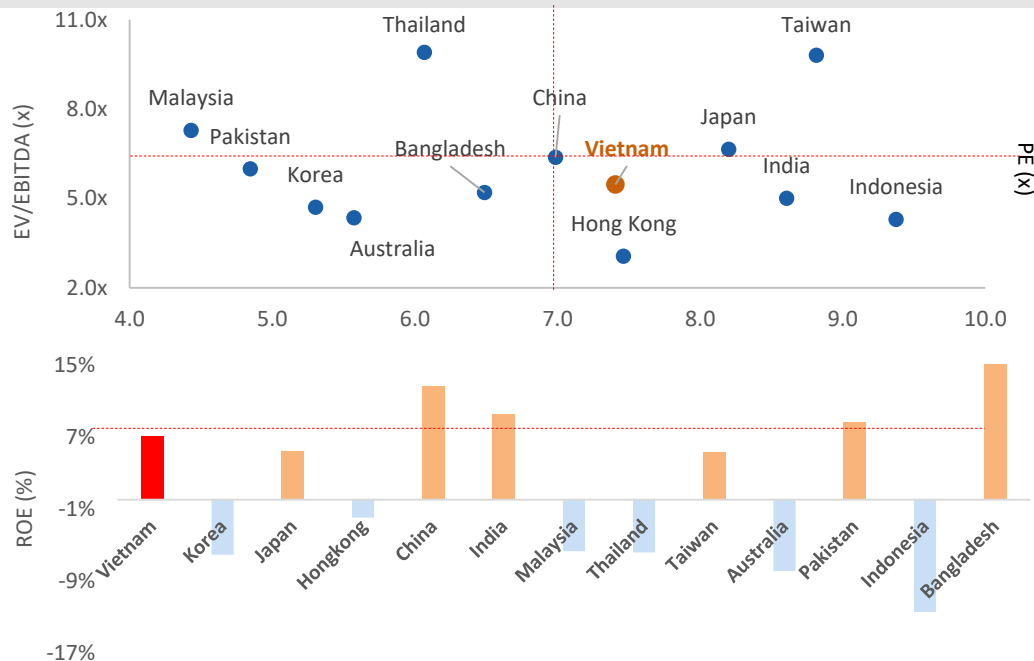


Figure 22. Relative valuation of Vietnam vs. Asian steel (ROE, EV/EBITDA, and PE)



2020 steel outlook

We **OVERWEIGHT** Vietnam's steel industry for FY20, with forecast valuation equal to EV/EBITDA of 6.5x and P/E of 8.5x (T12M 2019: EV/EBITDA 5.5x and P/E 7.5x)

Our valuation is backed up by the following:

- More stable price of raw materials, including steel scrap, iron ore, coking coal, and graphite electrodes.
- An additional 4mn tonnes of HRC from DQCS and FHS will help stabilize the input price of steel and reduce dependence on imported material.
- DQCS's flash furnace will operate commercially from 1Q20, which has caused us to increase our valuation of HPG to US\$3.48bn (upside +25% YoY).
- We are positive on HSG, with its cash conversion cycle (CCC) forecast to reach 64.2 days (currently 79.3 days) and Debt/Asset to be 58.1% (currently 62%).
- Organic growth of the real estate sector, thanks to huge demand for residential real estate.

Figure 23. Vietnam's construction and infrastructure industry

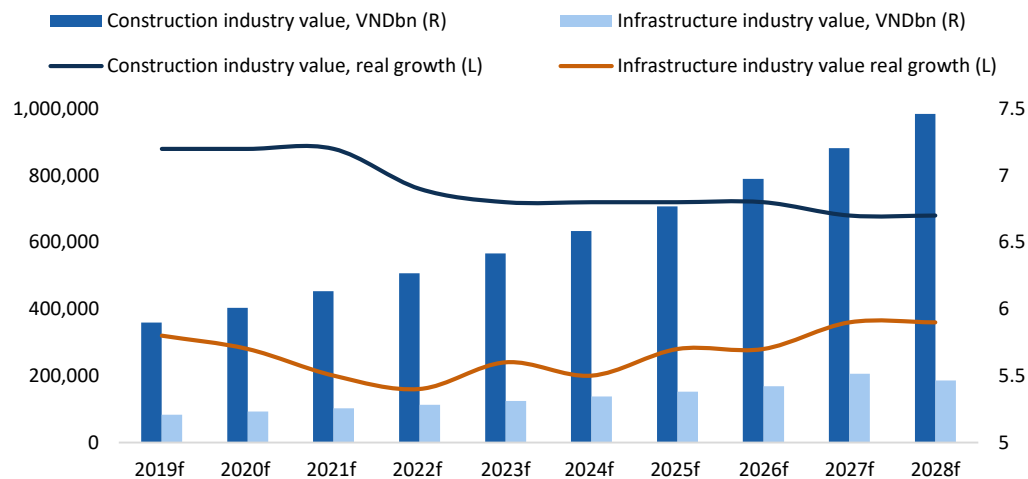
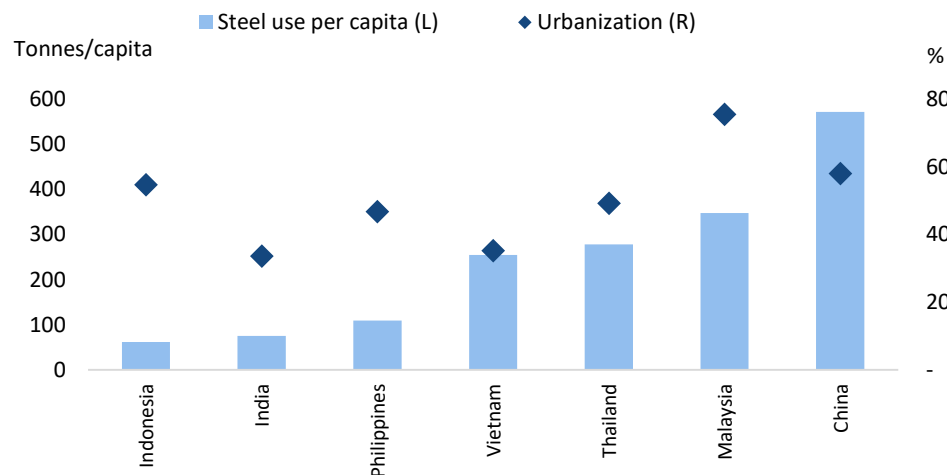


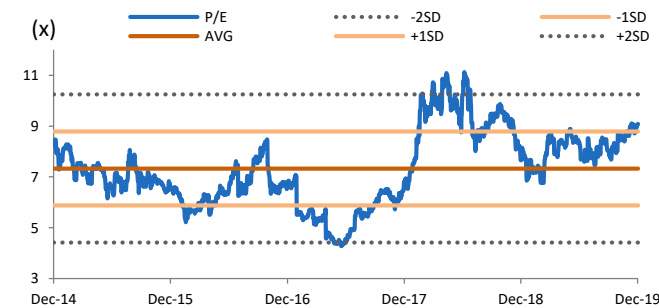
Figure 23. Steel use per capita of some Asian countries



HOA PHAT GROUP JSC (HPG VN) /BUY/ TP: VND28,730 (+25.2%)

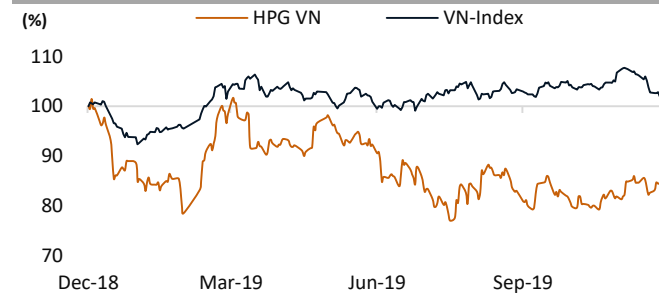
Criteria	HPG VN EQUITY
Market Cap (VND bn)	63,504
Shares Outstanding (mn)	2,761
Free Float (%)	25.4
Foreign Ownership (%)	40%
Beta (12M)	1.11
52-Week Low (VND)	20,510
52-Week High (VND)	27,204
3M average trading volume (Shares)	5,583,235

5-year P/E band chart



Stock performance	1M	3M	12M
Absolute (%)	-7.3	-8.1	-26.1
Relative (%)	-1.7	-6.1	-26.9

Price Movement



Investment highlights

- ❑ **HPG sales outperforms industry amid slower market demand:** In November 2019, sales of construction steel recorded significant growth, with total volume of 300,000MT. Accumulated 11M19, the total volume of construction steel rose to 2.5mn MT (+28% YoY), including 220,000MT exported to Asian and US markets.
- ❑ **Forecast total volume of construction steel and pipeline in FY19 to be 2.7mn MT (+20% YoY) and 745,000MT (+14% YoY), respectively:** These figures are equivalent to revenue of VND65,387bn (+17.1% YoY) and NPAT of VND 7,687bn (-14.6% YoY). In our forecast, the Dung Quat Complex contributed 500,000MT of construction steel, and from FY20, the first two blast furnaces will contribute 1.5mn MT of construction steel, equivalent to revenue of VND18,900bn (22% of total revenue in FY20). We forecast blast furnace 1 and 2 to run commercially from 1Q20, with a utilization rate in FY20 of 75% (equals 1.5mn MT of construction steel).
- ❑ **Blast furnace 3 and 4 will run trials in 1H2020:** We are positive about the added HRC volume. We forecast in FY20, HPG will produce 750,000mt of HRC. We believe HPG can sell this HRC to other color-coated steel manufacturers, such as HSG, NKG, and DTL, for use as input material. We calculate the HRC price of HPG at around VND12mn/MT, lower than VND1.5–2mn/MT for HRC imported from China.

FY (Dec)	FY 2016	FY 2017	FY 2018	FY 2019F	FY 2020F
Revenue (VNDbn)	33,283	46,162	55,836	65,387	87,362
OP (VNDbn)	7,856	9,622	10,550	9,604	12,564
OP margin (%)	23.6%	20.8%	18.9%	14.7%	14.4%
NP (VNDbn)	6,602	8,007	8,573	7,309	9,015
EPS (VND)	2,393	2,903	3,115	2,660	3,281
ROE (%)	19.8%	17.4%	15.4%	11.2%	10.4%
P/E (x)	6.2	8.9	7.6	8.9	7.2
P/B (x)	0.4	0.7	0.6	0.7	0.6
Dividend yield (%)	NA	NA	NA	NA	NA

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