

# SECTOR CREDIT INSIGHTS

## STEEL INDUSTRY

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## I. MARKET LANDSCAPE

### 1.1. Overview & Market sizing

The Vietnam steel market has witnessed significant growth and transformation in recent years, reflecting the country's rapid economic development and increasing demand for steel products. The industry has become a vital sector within Vietnam's manufacturing and construction sectors, supporting infrastructure projects, real estate development, and industrial expansion.



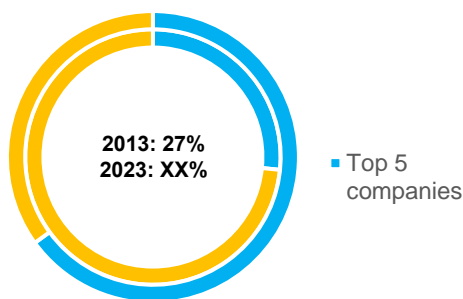
In terms of market sizing, the Vietnam steel market has experienced substantial expansion. The country's steel production capacity has increased significantly in response to growing domestic demand and export opportunities. According to Vietnam Steel Association ("VSA"), Vietnam's crude steel production reached [X] million tons in [year], showcasing a notable increase from previous years.

The construction sector has been a major driver of steel demand in Vietnam. Rapid urbanization, infrastructure development, and a thriving real estate market have contributed to the rising need for steel products, including reinforced bars, structural steel, and steel sheets. Additionally, industrial growth and manufacturing activities have further stimulated the demand for steel in sectors such as machinery, industrials and appliances. Furthermore, the export potential of Vietnam's steel products has expanded in recent years. The country has become an exporter of steel, supplying international markets with a range of steel products.

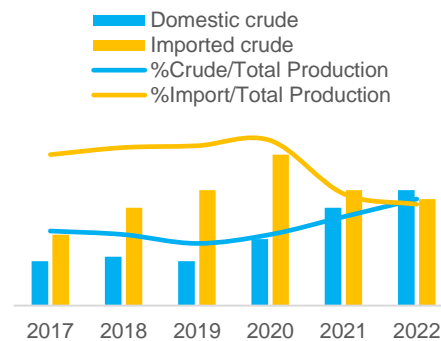
### 1.2. Growth drivers and market trends

- The steel industry is developing upstream of the value chain, reducing its dependence on imports.** In the past, Vietnam's steel industry heavily relied on imports, particularly from China, to meet its demand for steel products. The primary imported products were crude steel, which required significant investment capital and was not a focal point for domestic enterprises. However, the situation started to change in 2015 when companies like Hoa Phat and Formosa made substantial investments in the sector. This led to an improvement in domestic crude steel production capacity, resulting in a significant decrease in import volumes. Currently, imports only constitute approximately 55-60% of the total crude steel production, indicating a shift towards developing the upstream segment of the value chain and reducing dependence on imports.

**Exhibit: Market shares of Top 5 Company in Steel Industry after 10 years**



**Exhibit: Steel production in Vietnam (2017-2022)**



Sources: FiinRatings estimates from General Statistic Office ("GSO"), Vietnam Steel Association ("VSA"), Ministry of Investment and Trade ("MoIT")

- The structure of Vietnam's steel industry is undergoing a significant transformation towards greater consolidation.** This consolidation can be observed with the emergence of large-scale projects such as the Dung Quat Steel Complex by Hoa Phat Group JSC and the Vung Ang Steel Complex by Formosa. These projects have played a pivotal role in the industry's development by consolidating operations and resources. As a result, the market share of the five largest steel producers has increased from 27% in 2013 to [x]% in 2022. This trend is expected to continue in the future as more large projects, such as the Dung Quat Steel Complex Phase II, are set to become operational. This centralization of the industry is reshaping the competitive landscape and paving the way for enhanced efficiency and competitiveness in the Vietnamese steel market.

### 1.3. Demand and supply dynamics

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### 1.4. Government regulations and policies

In addition to domestic regulations, trade protectionism measures play a significant role in shaping the competitive landscape of the Vietnam steel industry. The government may impose trade barriers such as tariffs, quotas, or anti-dumping duties to safeguard the interests of domestic steel producers. These measures aim to limit imports and provide protection to the local industry against foreign competition. However, they can also affect the availability of raw materials, increase production costs, and impact the overall competitiveness of the steel sector. Moreover, tariffs imposed by foreign countries on Vietnamese steel exports pose challenges for the industry's growth and market expansion. Higher tariffs increase the cost of exporting steel products, making them less competitive in international markets.

Country	Content	Progress	Assessment
<b>Vietnam</b>	Anti-dumping duty on construction and billet steel	Effective until March/2023 In the final review stage	Without an extension of anti-dumping duty, the risk of competition from Chinese steel is expected to rise. However, we assess there is low likelihood of a situation similar to the Chinese steel overflow into Vietnam observed at the end of 2015.
	Anti-dumping duty on Galvanized steel	Effective from October 2019 – October 2024	
	Anti-dumping duty on stainless steel	Effective from October 2019 – October 2023	
<b>Malaysia</b>	INTENTIONALLY LEFT BLANK FOR ILLUSTRATION PURPOSES		
<b>Indonesia</b>			
<b>EU</b>			

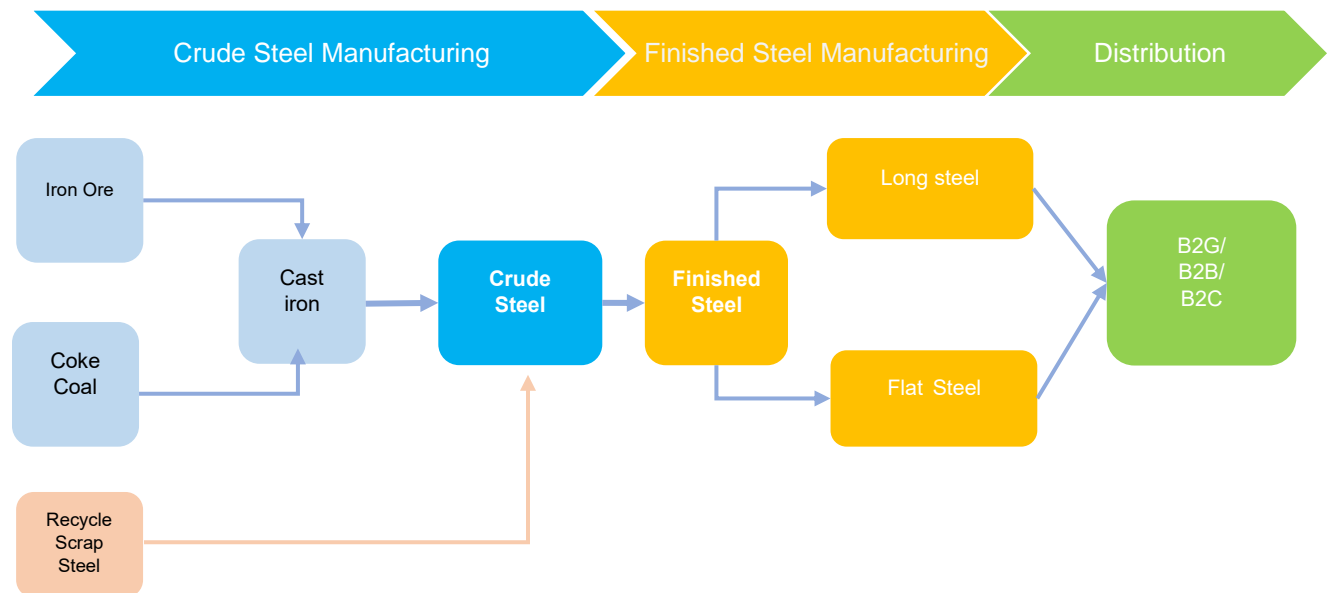
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## II. COMPETITIVE LANDSCAPE

### 2.1. Value chain and Market segmentation

Steel production process can be divided into 3 main stages including:

- (1) **Crude Steel Manufacturing:** This stage involves the transformation of raw materials, such as iron ore, coal, and limestone, into molten iron in a blast furnace. The molten iron is then converted into crude steel through various processes like basic oxygen furnace (BOF), electric arc furnace (EAF), or other steelmaking methods. The crude steel manufacturing stage focuses on achieving the desired chemical composition and properties of the steel.
- (2) **Finished Steel Manufacturing:** Once the crude steel is produced, it undergoes further processing to create finished steel products. This stage involves shaping the crude steel into specific forms, such as sheets, bars, rods, pipes, or structural components. Various manufacturing techniques, including rolling, forging, casting, and extrusion, are employed to shape and refine the steel into its final form. Quality control measures are also implemented during this stage to ensure that the finished steel meets the required specifications and standards.
- (3) **Distribution:** The final stage of the steel production process involves the distribution of finished steel products to end users and customers. This stage encompasses activities such as storage, packaging, transportation, and logistics to ensure timely delivery of the steel products to the intended markets or construction sites. Distribution channels may include wholesalers, retailers, construction companies, and other entities involved in the supply chain.



In terms of products, steel products can be categorized into 02 primary groups:

- (i) **Long steel:** This group includes bar steel, coil steel, and section steel. Long steel products are primarily used in the construction industry for forming building structures. These products possess excellent load-bearing capabilities and other physical properties that make them suitable for structural applications.
- (ii) **Flat steel:** The second group consists of steel pipe, galvanized sheet, cold rolled coil ("CRC:"), and hot rolled coil ("HRC"). Flat steel products find extensive use in finishing works and the manufacturing of household appliances. These products offer superior anti-corrosion properties, making them ideal for applications such as roofing, balustrades, shutters, and other similar purposes.

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## 2.2. Key players and market competition

Within the industry, there are several manufacturing enterprises that boast comprehensive value chains and substantial scales. Notably, Hoa Phat Group (“HPG”) stands out as the largest enterprise in Vietnam in terms of capacity, currently producing a remarkable 8.0 million tons annually. Additionally, HPG and Formosa holds the distinction of being the only 2 sole domestic producer of hot rolled coil). Following closely behind is Hoa Phat Group Joint Stock Company, with an annual capacity of 3 million tons, and Hoa Sen Group Joint Stock Company, with a capacity of 2.8 million tons per year.

**Exhibit x: Top 5 Major steel producers**

No	Company	Listed status	Capacity (mn ton/year)	Products	Market share
1	Hoa Phat Group	HPG	8.0	Long steel, Coil, Pipe, HRC	35.2%
2	Formosa	unlisted	7.5	Long steel, Coil, Pipe, HRC	x %
3	Company B	listed	2.8	Galvanized steel, Coil, Pipe	x %
4	Company C	listed	1.5	Long steel	x %
5	Company D	unlisted	1.0	Long steel, Billet	x %

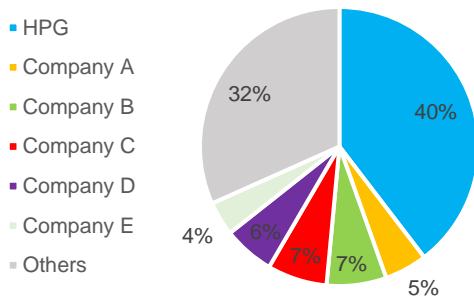
Sources: FiinRatings estimates from Vietnam Steel Association (“VSA”)

Despite their already leading production capacities, large enterprises continue to actively expand their production capabilities and invest in new projects. This ongoing commitment to growth suggests that the industry's designed capacity may witness significant expansion in the next 2-3 years. Such developments signal a positive outlook for the sector, with the potential for increased output and further strengthening of Vietnam's manufacturing prowess.

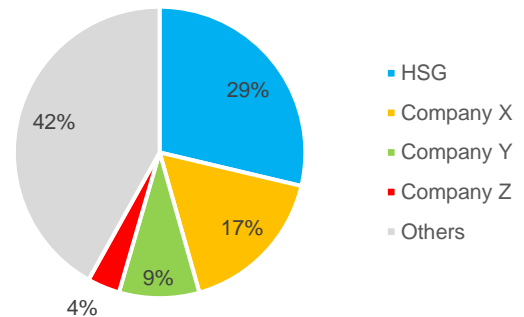
## 2.3. Competitive strategies and initiatives (SWOT)



**Exhibit: Construction steels market shares**



**Exhibit: Galvanized steels market shares**



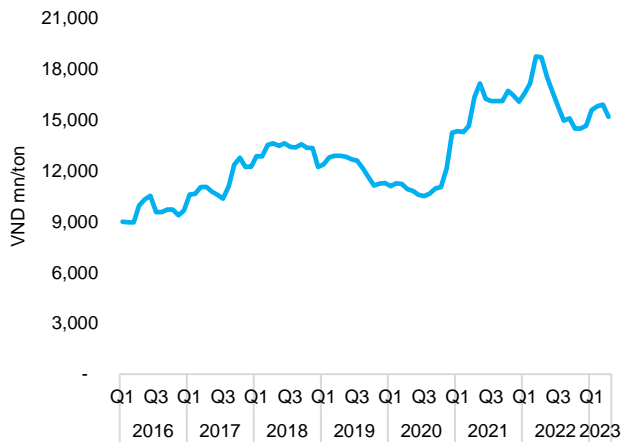
Sources: FiinRatings estimates from Vietnam Steel Association (“VSA”)

### III. KEY CREDIT RISK

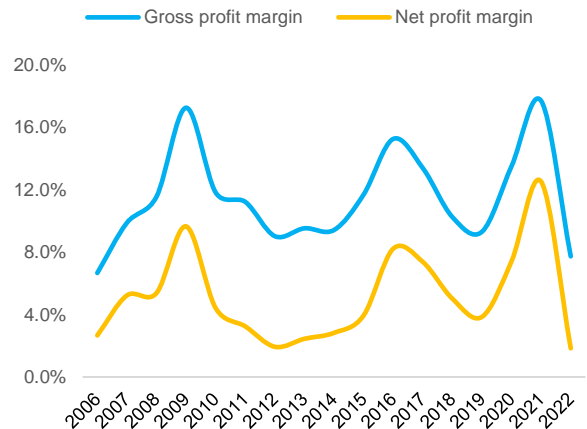
#### 3.1: Industry Cyclicalty

**Steel industry is characterized by its inherent high cyclicalty.** This cyclicalty refers to the pattern of alternating periods of growth and contraction in the industry's performance. The steel industry operates in a cyclical manner closely tied to economic cycles, as it serves key sectors like construction, infrastructure, automobiles, and capital goods, all of which are highly influenced by the overall state of the economy. The steel market is influenced by a complex interplay of factors such as global economic conditions, infrastructure development, construction activity, and manufacturing output. During periods of economic expansion, demand for steel rises as construction projects increase and industrial production surges. This leads to a corresponding increase in steel prices and profitability for steel manufacturers. However, during economic downturns or recessions, demand for steel declines as construction and manufacturing activities slow down. This results in excess capacity, inventory build-up, and price pressures, leading to reduced revenues and profitability for steel companies.

**Exhibit: Construction steel average price (2016-1H2023)**



**Exhibit: Profit margin of Vietnamese steel companies (2006-2022)**



Sources: FiinRatings estimates from Vietnam Steel Association ("VSA")

The industry's cyclicalty is also influenced by various factors, including supply dynamics and regional weaknesses that impact market conditions. This interplay can cause short-term price volatility and prolonged periods of high or low prices. When there are substantial capacity additions and sluggish demand, prices can sharply decrease. Conversely, limited supply and rising demand can lead to inflated market prices. These imbalances and pricing fluctuations can persist for significant durations. During downturns, prices may even fall below the production cost, resulting in losses and the need for costly capacity closures. The steel industry's high fixed costs, particularly for integrated producers, intensify oversupply during downturns as they strive to operate at full capacity. On the other hand, as companies increase production to meet future growth, pricing can be strained until demand catches up with the expanded supply. The industry's cyclicalty is further magnified by the volatility in both demand volume and pricing, as the major consumers of steel sectors such as construction, automotive, and mechanical engineering, exhibit significant cyclicalty due to their reliance on discretionary consumer and capital goods.

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### 3.2. Competitive Risk and Growth

#### 3.2.1 Effectiveness of the industry's barriers to entry

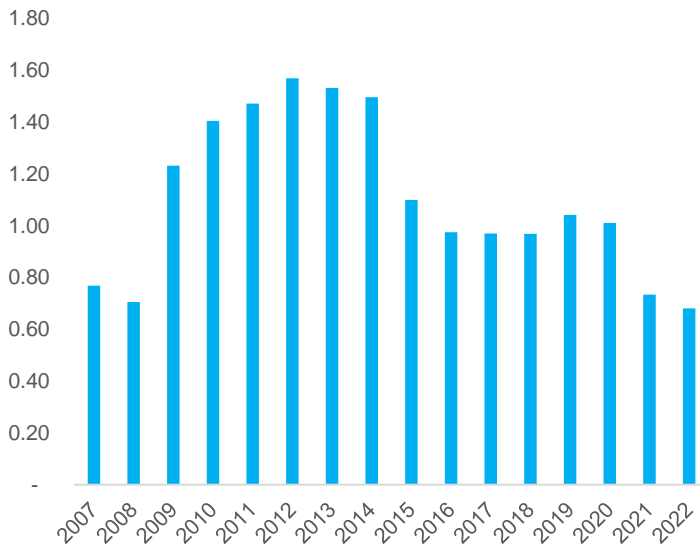
**The steel industry presents significant barriers to entry**, making it challenging for new entrants to establish themselves in the market. Firstly, the industry requires substantial capital investment due to the establishment of a steel production facility, which necessitates significant upfront investments in infrastructure, equipment, and technology. The capital-intensive nature of the industry creates a high financial barrier, as new entrants must secure substantial funding to set up operations and compete effectively. Additionally, existing steel manufacturers often benefit from economies of scale, enabling them to produce steel at lower average costs as they increase their output. This creates a disadvantage for new entrants, who struggle to achieve the same level of efficiency and cost-effectiveness due to their smaller scale of operations. Moreover, the steel industry is characterized by complex supply chains that involve raw material sourcing, processing, distribution, and customer relationships. Building and managing these intricate networks requires industry knowledge, established partnerships, and extensive logistical capabilities, all of which pose significant barriers for new players attempting to enter the market. These barriers collectively create a formidable challenge for prospective entrants seeking to establish themselves in the highly competitive steel industry.



#### 3.2.2. Financing Risk

**The steel industry faces significant financing risks** that can impact its operations and growth prospects. Firstly, the capital-intensive nature of the industry demands substantial investments in infrastructure, equipment, and technology. Steel producers often rely on external financing sources, such as bank loans, bonds, or equity offerings, to fund these capital requirements. However, securing financing can be challenging due to the industry's cyclical nature and the inherent risks associated with steel production.

**Exhibit: Debt/Equity level of Vietnamese steel companies (2007-2022)**



Sources: the data is estimated from 30 listed steel companies based on their financial statements

### 3.2.3. Environmental Risk

**The steel industry is exposed to significant environmental risks** that require careful management and mitigation. Firstly, steel production is resource-intensive and energy-intensive, resulting in substantial greenhouse gas emissions and contributing to climate change. The industry's reliance on coal and other fossil fuels for energy and the release of carbon dioxide during the steelmaking process contribute to carbon footprints. Consequently, steel companies face increasing pressure to reduce their carbon emissions and transition to more sustainable energy sources. Secondly, steel production involves the consumption of natural resources, including iron ore and coal, which can deplete non-renewable resources and disrupt ecosystems through mining activities. Responsible sourcing and efficient use of raw materials are critical to minimize environmental impacts. Additionally, the steel industry generates significant amounts of waste, including slag, dust, and other by-products. Proper waste management and treatment processes are essential to prevent pollution and minimize the environmental footprint.

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Lastly, water consumption is a significant concern for the steel industry, particularly in regions where water scarcity is prevalent. Steel manufacturing requires substantial water usage for cleaning, and other production processes, leading to potential strain on local water resources. Implementing water conservation measures and adopting technologies to minimize water usage are essential for sustainable operations. Overall, the steel industry faces environmental risks related to greenhouse gas emissions, resource consumption, waste management, and water usage. Addressing these risks through sustainable practices, innovation, and regulatory compliance is crucial to ensure the industry's long-term viability and minimize its environmental impact.

### 3.2.4. Regulation risk: Trade protectionism and tariffs

**The steel industry in Vietnam is subject to regulation, trade protectionism, and tariffs, which significantly impact its operations and competitiveness.** Firstly, the industry operates under the regulatory framework established by the Vietnamese government, which sets guidelines and standards for production, environmental compliance, worker safety, and product quality. Compliance with these regulations is crucial for steel manufacturers to ensure smooth operations and maintain their market reputation.

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In addition to domestic regulations, trade protectionism measures play a significant role in shaping the competitive landscape of the Vietnam steel industry. The government may impose trade barriers such as tariffs, quotas, or anti-dumping duties to safeguard the interests of domestic steel producers. These measures aim to limit imports and provide protection to the local industry against foreign competition. However, they can also affect the availability of raw materials, increase production costs, and impact the overall competitiveness of the steel sector. Moreover, tariffs imposed by foreign countries on Vietnamese steel exports pose challenges for the industry's growth and market expansion. Higher tariffs increase the cost of exporting steel products, making them less competitive in international markets. This can limit market access, reduce export volumes, and put pressure on the profitability of Vietnamese steel companies. To navigate these regulatory and trade challenges, steel industry participants in Vietnam need to closely monitor and adapt to changes in regulations, anticipate trade protectionism measures, and explore strategies to mitigate the impact of tariffs. They may seek opportunities to diversify their product range, target niche markets, enhance operational efficiency, and invest in research and development to improve product quality and meet evolving market demands. Collaboration with industry associations and engaging in dialogues with policymakers can also help shape favorable trade policies and promote a conducive business environment for the Vietnam steel industry.





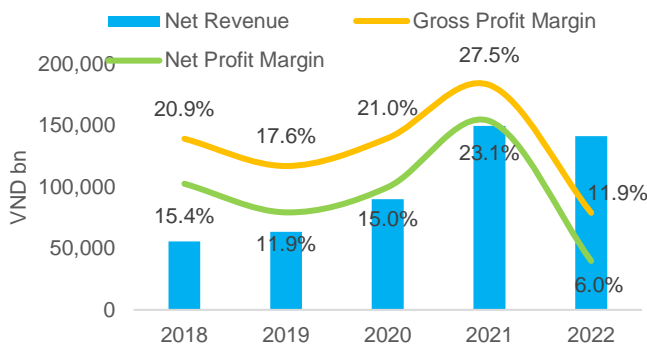
## V. CREDIT PROFILE OF KEY PLAYERS

Issuer Name	Assessment Type	Assessment Date	Score Category	Outlook
Hoa Phat Group ("HPG")	Issuer Credit Assessment	December 31 <sup>st</sup> , 2022	[a]*	[Stable]

### Industry Classification: Metal & Minings | Steel

**Company Overview:** Hoa Phat Group (HPG) is one of the leading industrial conglomerates in Vietnam. Founded in 1992, HPG has grown rapidly over the years and has established itself as a major player in various industries. The group's core business sectors include steel production, construction, real estate, and agriculture. Through its steadfast dedication to outstanding performance and state-of-the-art manufacturing methods, HPG has achieved a commanding market position in the production of construction steel and steel pipes, solidifying its position as a frontrunner in the industry. HPG is recognized as the foremost provider in Vietnam for these product categories, demonstrating its remarkable standards of quality and dependability.

Exhibit 1: HPG's revenue and profit margin (2018-2022)



Source: HPG, FiinRatings.

**Assessment Summary:** The preliminary credit score of HPG is in **[a] category with a stable outlook**. The assigned score is derived from HPG's strong competitive position, notably as a leader in Vietnam's steel industry, which is bolstered by its reputable brand name established over a 31-year period. Additionally, the company's financial risk profile is evaluated as modest due to its lower leverage ratio in comparison to the industry average. This financial strength gives HPG the ability to withstand financial shocks and invest in its business.

#### Issuer's credit strength:

- HPG holds dominant market positions in the production of construction steel and steel pipes, establishing itself as a leading player in the industry. Besides, the Company is the cost-leader of the sector, which results in higher profitability and operating efficiency levels.
- HPG maintains a lower leverage ratio compared to the industry average. This indicates that the company relies less on debt financing and exhibits a more conservative approach to financial leverage.

#### Issuer's credit weaknesses:

- HPG's heavy reliance on the steel market makes it susceptible to fluctuations in steel prices and demand. Any adverse changes in market conditions can significantly impact the company's financial performance.

### Credit Assessment Snapshot:

Criteria	Assessment
<b>Business Risk Profile</b>	<b>Strong (2/6)</b>
Industry Risk	Moderately high risk (4/6)
Competitive Position	Strong (2/6)
<b>Financial Risk Profile</b>	<b>Modest (2/6)</b>
<b>Stand-alone Credit Profile</b>	<b>[a]</b>
<b>Modifiers</b>	<b>N/A</b>
<b>Issuer Credit Assessment</b>	<b>[a]</b>
<b>Outlook</b>	<b>Stable</b>

#### Upside scenarios:

- Further strengthening in the firm's business profile, demonstrated by the resilience of its operating profitability and cash flow.
- A permanent reduction in financial leverage, allowing Total Debt/Equity to drop <0.4x.

#### Downside scenarios:

- Significant deterioration in operating profitability, with EBITDA margin falling below 18%, and the pursuit of large debt-funded businesses or a significant step-up in cash returns to shareholders.
- Increased leverage and remarkable weakening in financial metrics, with Debt/EBITDA >4.0x.

#### Preliminary SACP Relative Ranking (Dec 31<sup>st</sup> 2022):

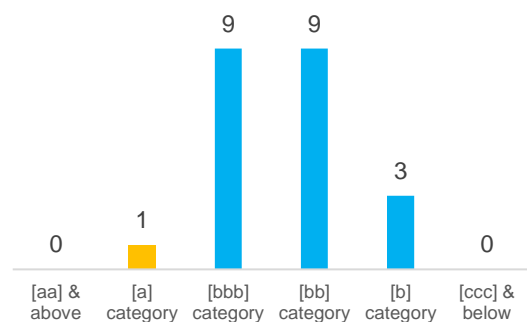


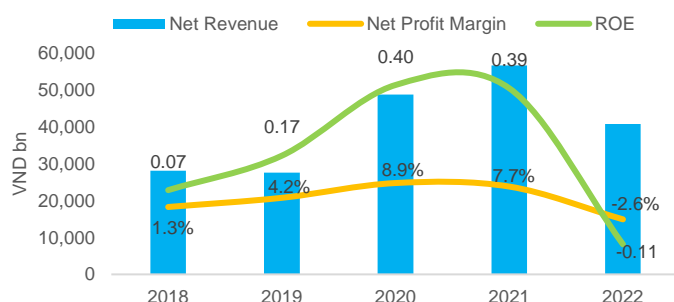
Exhibit 2: Key Metrics in 2018-2022 of HPG (Fiscal year ended Dec. 31 ( )

	Unit	2018	2019	2020	2021	2022
Net Revenue	VND bil	55,836.5	63,658.2	90,118.5	149,679.8	141,409.3
Gross profit	VND bil	11,670.8	11,185.4	18,904.0	41,108.4	16,763.4
Net Profit	VND bil	8,600.6	7,578.2	13,506.2	34,521.0	8,444.4
Total Assets	VND bil	78,223.0	101,776.0	131,511.4	178,236.4	170,335.5
Debt/EBITDA	x	1.88	2.90	2.42	1.25	2.93
Debt/Equity	x	0.60	0.77	0.91	0.63	0.60

Issuer Name	Assessment Type	Assessment Date	Score Category	Outlook
Hoa Sen Group Joint Stock Company ("HSG")	Issuer Credit Assessment	December 31 <sup>st</sup> , 2022	[bbb]*	[Stable]

**Industry Classification:** Metal & Minings | Steel

**Company Overview:** Establish in 2001, Hoa Sen Group Joint Stock Company (HSG) operates in both the upstream (manufacturing) and downstream (retail to end consumers) sectors of the steel industry. Their products are produced using materials such as hot rolled coil (HRC) and cold rolled steel (CRC). The primary focus of HSG in its operational history has been on the production of galvanized sheets. This product has consistently held a market share of approximately 35-40% in the overall Vietnamese market for a significant period.

**Exhibit 1: HSG's revenue and profit margin (2018-2022)**


Source: HSG, FiinRatings.

**Assessment Summary:** The preliminary credit score of HSG is in **[bbb] category with a stable outlook**. The assigned score reflects stands as a leading player in the Vietnamese steel industry, known for its expertise in manufacturing galvanized steel sheets, steel pipes, and plastic pipes. Nevertheless, HSG's dual engagement in manufacturing and retailing poses challenges in effectively managing raw material inventory as a manufacturer and finished product stock as a retailer. During periods of industry downturn, HSG experiences adverse effects on its gross profit margin, impacting both output and input and resulting in a decline in overall profitability.

**Issuer's credit strength:**

- With its strong distribution channel and export capabilities, HSG continues to have a leading position in Vietnam's steel sector.

**Issuer's credit weaknesses:**

- The demand for galvanized steel sheet and steel pipe remains sluggish in both domestic and export markets, which will continue to put pressure on the company's medium and long-term business results.
- HSG exhibits a high degree of dependence on the steel market, rendering it vulnerable to fluctuations in steel prices and demand. Any unfavourable shifts in market conditions have the potential to exert a substantial impact on the company's financial performance.

**Credit Assessment Snapshot:**

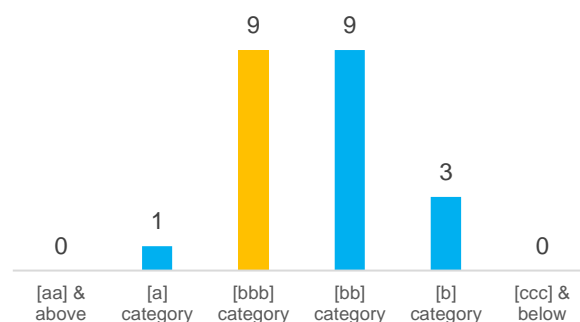
Criteria	Assessment
<b>Business Risk Profile</b>	<b>Satisfactory (3/6)</b>
Industry Risk	Moderately high risk (4/6)
Competitive Position	Satisfactory (3/6)
<b>Financial Risk Profile</b>	<b>Intermediate (3/6)</b>
<b>Stand-alone Credit Profile</b>	<b>[bbb]</b>
<b>Modifiers</b>	<b>N/A</b>
<b>Issuer Credit Assessment</b>	<b>[bbb]</b>
<b>Outlook</b>	<b>Stable</b>

**Upside scenarios:**

- The firm's business profile exhibits further strengthening, as evidenced by its resilient operating profitability and cash flow.
- A permanent reduction in financial leverage, allowing Total Debt/EBITDA to drop <2.0x.

**Downside scenarios:**

- Significant deterioration in operating profitability, with gross profit margin falling below 4.x% and Net Profit Margin continue negative.
- Increased leverage and financial analytical metrics, with Debt/Equity > 0.7x.

**Preliminary SACP Relative Ranking (Dec 31<sup>st</sup> 2022):**

**Exhibit 2: Key Metrics in 2018-2022 of HSG (Fiscal year ended Dec. 31)**

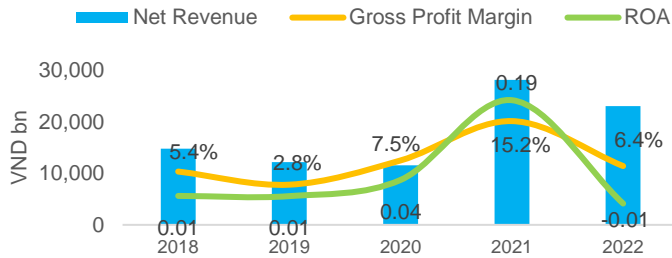
	Unit	2018	2019	2020	2021	2022
Net Revenue	VND bil	34,100.3	27,074.3	30,054.0	56,560.6	40,694.9
Gross profit	VND bil	3,403.0	3,544.6	5,172.1	9,504.9	2,954.3
Net Profit	VND bil	136.4	489.8	1,543.1	4,379.1	(1,068.1)
Total Assets	VND bil	19,834.2	16,725.1	17,350.8	22,932.3	15,963.7
Debt/EBITDA	x	5.70	3.71	2.08	0.92	8.12
Debt/Equity	x	2.35	1.66	1.05	0.53	0.26

Issuer Name	Assessment Type	Assessment Date	Score Category	Outlook
X Joint Stock Company ("X")	Issuer Credit Assessment	December 31 <sup>st</sup> , 2022	[bb]*	[Stable]

**Industry Classification:** Metal & Minings | Steel

**Company Overview:** X Joint Stock Company (X) is an established participant in the steel industry, with a history of long-term operations since its establishment in 2002. The company primarily engages in the manufacturing of various steel sheets, encompassing galvanized steel sheets, colour coated steel sheets, as well as the trading of diverse iron and steel products.

**Exhibit 1: X's revenue and profit margin (2018-2022)**



Source: X, FiinRatings.

**Assessment Summary:** The preliminary credit score of X is in **[bb] category with a stable outlook**. Although X has strong market share in steel industry, the company operating efficiency and profitability are relatively lower than its peers. X's sales strategy primarily emphasizes export, which makes it highly dependent on the regulation of other countries. Unlike Hoa Sen Group (HSG), the company lacks control over the source of customers due to this reliance on external market dynamics. Additionally, the company's leverage ratio experienced a significant increase in 2022, with a Debt/Equity ratio of 0.96.

**Issuer's credit strength:**

- X has strong market positions in the production of construction steel and steel pipes. The company secures the second-largest market share for galvanized sheets in Vietnam, placing it right after HSG in terms of market dominance.
- X has effectively minimized its reliance on externally purchased raw materials by prioritizing the optimization of the production chain through a closed production model, as opposed to pursuing extensive mass production.

**Issuer's credit weaknesses:**

- The demand for galvanized steel sheet and steel pipe remains sluggish in both domestic and export markets, which will continue to put pressure on the company's medium and long-term business results.
- The company is subject to the impact of price fluctuations in imported HRC input materials.

**Credit Assessment Snapshot:**

Criteria	Assessment
<b>Business Risk Profile</b>	<b>Fair (4/6)</b>
Industry Risk	Moderately high risk (4/6)
Competitive Position	Fair (4/6)
<b>Financial Risk Profile</b>	<b>Significant (4/6)</b>
<b>Stand-alone Credit Profile</b>	<b>[bb]</b>
<b>Modifiers</b>	<b>N/A</b>
<b>Issuer Credit Assessment</b>	<b>[bb]</b>
<b>Outlook</b>	<b>Stable</b>

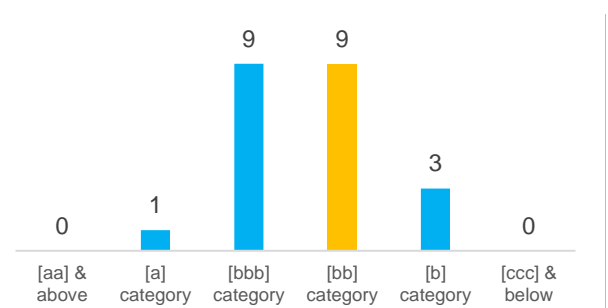
**Upside scenarios:**

- Further strengthening in the firm's business profile, demonstrated by the resilience of its operating profitability and cash flow.
- A permanent reduction in financial leverage, allowing Total Debt/Equity to drop <0.6x.

**Downside scenarios:**

- The operating profitability of the company is expected to experience a substantial deterioration, as indicated by the persistently negative gross profit margin and net profit margin projected for the upcoming 12–24-month period.
- Increased leverage and remarkable weakening in financial metrics, with Debt/Equity >1.2x.

**Preliminary SACP Relative Ranking (Dec 31<sup>st</sup> 2022):**



**Exhibit 2: Key Metrics in 2018-2022 of X (Fiscal year ended Dec. 31)**

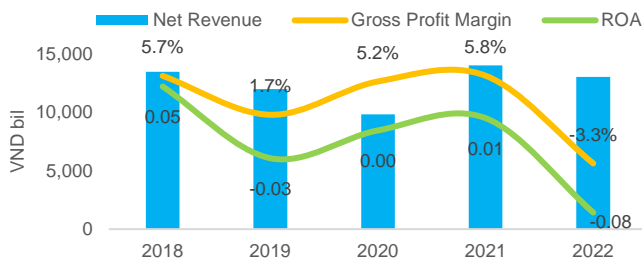


Issuer Name	Assessment Type	Assessment Date	Score Category	Outlook
A Steel Joint Stock Company ("A")	Issuer Credit Assessment	December 31 <sup>st</sup> , 2022	[b]-[bb]*	[Stable]

**Industry Classification:** Metal & Minings | Steel

**Company Overview:** Founded in 1999, A Steel Joint Stock Company ("A") has evolved into a group comprising three technologically advanced Electric Arc Furnace (EAF) facilities and construction steel rolling mills, which have been imported from Italy and Germany. These state-of-the-art facilities enable Aina to achieve an annual production capacity of 1.1 million tons of construction steel and 1.5 million tons of billet. Notably, A holds the distinction of being the largest producer of construction steel using EAF furnace technology in Vietnam, while also operating the largest capacity billet factory in Southeast Asia.

**Exhibit 1: A's revenue and profit margin (2018-2022)**



Source: A, FiinRatings.

**Assessment Summary:** The preliminary credit score of A is in [b]-[bb] category with a stable outlook. Despite A's well-established brand presence, particularly in the southern region of Vietnam, the company's operational efficiency and profitability fall below the industry average, as indicated by negative gross profit and net profit figures. Furthermore, A exhibits a significantly higher level of financial leverage compared to its industry peers, with a Debt/Equity ratio of approximately 2.3x over the past two years.

**Issuer's credit strength:**

- With 24-year experience, A has established a reputable brand, particularly in the southern region of Vietnam. This strong brand presence positions A as a trusted partner for major projects, as the company has built long-standing relationships with its traditional customer base.

**Issuer's credit weaknesses:**

- Due to the utilization of EAF furnace technology, the production costs for products are higher compared to those produced using BOF furnaces or imported construction steel. As a result, the products face challenges in terms of price competitiveness in the market.
- A demonstrates a strong reliance on the steel market, making it susceptible to changes in steel prices and demand. Any adverse shifts in market conditions can have a significant impact on the company's financial performance.

**Credit Assessment Snapshot:**

Criteria	Assessment
<b>Business Risk Profile</b>	<b>Fair (4/6)</b>
Industry Risk	Moderately high risk (4/6)
Competitive Position	Fair (4/6)
<b>Financial Risk Profile</b>	<b>Aggressive (5/6)</b>
<b>Stand-alone Credit Profile</b>	<b>[b]-[bb]</b>
<b>Modifiers</b>	<b>N/A</b>
<b>Issuer Credit Assessment</b>	<b>[b]-[bb]</b>
<b>Outlook</b>	<b>Stable</b>

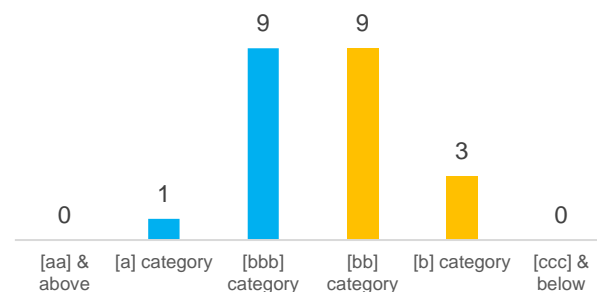
**Upside scenarios:**

- Further strengthening in the firm's business profile, demonstrated by the resilience of its operating profitability and cash flow.
- A permanent reduction in financial leverage, allowing Total Debt/Equity to drop <1.5x.

**Downside scenarios:**

- The company anticipates a significant decline in operating profitability, evidenced by the continued negative gross profit margin and net profit. margin projected for the upcoming 12-24-month period.
- The company's leverage continues to rise, leading to a significant deterioration in financial metrics, with a Debt/Equity ratio exceeding 2.5x.

**Preliminary SACP Relative Ranking (Dec 31<sup>st</sup> 2022):**



**Exhibit 2: Key Metrics in 2018-2022 of A (Fiscal year ended Dec. 31)**

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