Steel

1. Background

a) Brief about the commodity:

Steel is the common name for a large family of iron alloys which are easily malleable after the molten stage. Steels are commonly made from iron ore, coal, and limestone. When these raw materials are put into the blast furnace, the result is a "pig iron" which has a composition of iron, carbon, manganese, sulphur, phosphorus, and silicon. As pig iron is hard and brittle, steelmakers must refine the material by purifying it and then adding other elements to strengthen the material. The steel is next deoxidized by a carbon and oxygen reaction.

Strongly deoxidized steel is called "killed", and a lesser degree of deoxidized steels are called "semikilled", "capped", and "rimmed". Steels can either be cast directly to shape, or into ingots which are reheated and hot worked into a wrought shape by forging, extrusion, rolling, or other processes. Wrought steels are the most common engineering material used, and come in a variety of forms with different finishes and properties. It is used in every aspect of our lives; in cars and construction products, refrigerators, and washing machines, cargo ships, and surgical scalpels.

Steel is not a single product. There are more than 3,500 different grades of steel with many different physical, chemical, and environmental properties.



Sample picture



b) Commodity fundamentals and balance sheet:

Table - Fundamentals & Balance sheet

Global Scenario	FY 2018-19	FY 2019-20
Opening Stocks	NA	NA
Production (Million Metric Tons)	131.572	76.326 (1.8)
Others (if any)	NA	NA
Consumption	97.536	75.05
Closing Stocks	NA	NA

Indian Scenario	FY2018-19	FY 2019-20
Opening Stocks(in Million Tons)	NA	NA
Production(in Million Tons)	110.92	82.192
Imports (in Million Tons)	7.83	5.51
Total Supply (in Million Tons)	118.75	87.702
Exports (in Million Tons)	6.36	6.52
Domestic Consumption(in Million Tons)	98.71	75.05
Closing Stocks(in Million Tons)	NA	NA



	(in million tons)		
Top 10 Major Producing Countries	FY2018-19	FY 2019-20	
China	928.26	996.3	
India	106.46	111.2	
Japan	104.32	99.3	
USA	86.61	87.8	
Russia	71.68	71.6	
South Korea	72.46	71.4	
Germany	42.44	39.7	
Turkey	37.31	33.7	
Brazil	34.74	32.2	
Iran	25.00	31.9	

Qty (in Million MT)

Top 10 Major Consuming Countries	Current FY
China	854.86
USA	120.71
India	110.66
Japan	82.62
South Korea	58.86
Russia	48.98
Germany	41.64
Brazil	34.74
Turkey	29.91
Iran	17.1

Top 10 Major Exporting Countries



Rank	Top 10 Major Exporting Countries	Qty (in Million MT) 2018	Rank	Top 10 Major Exporting Countries	Qty (in Million MT) 2019
1	China	84.90	1	China	48.30
2	Germany	37.20	2	Japan	26.70
3	Japan	21.70	3	Russia	22.70
4	USA	20.80	4	Ukraine	14.00
5	South Korea	18.40	5	South Korea	13.60
6	Mexico	15.50	6	Brazil	11.00
7	Italy	14.10	7	Iran	7.90
8	Spain	10.10	8	Turkey	7.40
9	Poland	9.70	9	India	4.40
10	France	8.00	10	Belgium	4.30

Top 10 Major Importing Countries

Rank	Top 10 Major Importing Countries	Qty (in Million MT) 2018	Rank	Top 10 Major Importing Countries	Qty (in Million MT)2019
1	USA	48.10	1	USA	19.80
2	Germany	25.90	2	Thailand	15.11
3	UK	12.20	3	European Union	12.40
4	France	12.20	4	Vietnam	10.30
5	China	11.50	5	Indonesia	9.20
6	Canada	11.40	6	Mexico	7.80
7	Mexico	11.30	7	Philippines	7.20
8	Italy	9.00	8	Poland	5.10
9	Belgium	8.70	9	Saudi Arabia	3.90
10	India	8.60	10	Algeria	3.20

- c) Major changes in the policies governing trade in the spot markets of the commodity :
 - i) The Government's vision to achieve a \$5 trillion economy by 2024 entails investments in several steel intensive sectors like infrastructure, housing for all, 100% electrification, piped water for all, etc. The growth potential for the sector is thus immense and the domestic steel consumption will increase significantly in line with this vision. It is, therefore, important to ensure that this demand is served through a robust domestic steel industry. The Ministry of Steel alongside the CPSEs have, therefore, undertaken several initiatives to create a globally competitive steel sector.
 - ii) the Chintan Shivir was organized on 23rd September 2019, as a collaborative platform to bring together all stakeholders of the Indian steel industry to address challenges, identify opportunities and arrive at tangible outcomes to steer the Indian steel industry on the path of sustainable growth. Over 900 stakeholders were part of this event. Over the course of the deliberations, 32 major challenges were identified. Additionally, 40 major suggestions were captured, and 17 initiatives of the Ministry of Steel were discussed by the gathered participants.



d) Geo political issues in the commodity and its impact on Indian scenario.: Corona pandemic slowed down the trade activities which impacted both demand and supply.

2. Trading related parameter

a) Monthly and Annual traded volume

Month	Volume (MT)
Apr-19	15754
May-19	19112
Jun-19	17792
Jul-19	22176
Aug-19	20983
Sep-19	14576
Oct-19	21134
Nov-19	21469
Dec-19	22712
Jan-20	25127
Feb-20	22443
Mar-20	21793
Grand Total	245071



- b) Annual traded volume as proportion of total deliverable supply: 0.21%
- c) Annual traded volume as proportion of total annual production:0.22%
- d) Annual average Open interest as proportion of total production:0.007%
- e) Annual average Open interest as proportion of total deliverable supply 0.0065%

Month	Value in Crores	Volume	Monthly and Annual quantity of delivery (In MTs)	Monthly and Annual value of delivery (in Crores)	OI in MT	Annual average volume to open interest ratio	Average Open Interest (OI) (in appropriate units)
19-Apr	536.39	15754	661.64	2.26	108110	14.57	5405.5
19-May	645.58	19112	180.76	0.61	126600	15.1	5,504.35
19-Jun	568.47	17792		0	137530	12.94	6,876.50
19-Jul	651.19	22176	963.17	2.91	210870	10.52	9,168.26
19-Aug	574.79	20983	19.91	0.05	223740	9.38	10,654.29
19-Sep	415.29	14576	1071.97	3.01	188700	7.72	8,985.71
19-Oct	591.97	21134	158.39	0.44	233110	9.07	10,135.22
19-Nov	607.3	21469	521.55	1.4	230160	9.33	10,960.00
19-Dec	673.99	22712	383.63	1.14	194360	11.69	9,255.24
20-Jan	814.08	25127	974.64	3.11	272350	9.23	11,841.30
20-Feb	714.03	22443	1992.54	6.28	190420	11.79	9,067.62
20-Mar	644.66	21793	676.735	2.06	122070	17.85	5,548.64
Grand Total	7,437.74	245071	691.358	23.27	2238020	10.95	8616.886

6 | Page



f) Monthly and Annual value of trade (in Rs. Crores)

Month	Value in Crores
Apr-19	536.39
May-19	645.58
Jun-19	568.47
Jul-19	651.19
Aug-19	574.79
Sep-19	415.29
Oct-19	591.97
Nov-19	607.3
Dec-19	673.99
Jan-20	814.08
Feb-20	714.03
Mar-20	644.66
Grand Total	7,437.74

g) Monthly and Annual quantity of delivery (in MTs)

Month	Monthly and Annual quantity of delivery (in MTs)
Apr-19	661.64
May-19	180.76
Jun-19	
Jul-19	963.17
Aug-19	19.91
Sep-19	1071.97
Oct-19	158.39
Nov-19	521.55
Dec-19	383.63
Jan-20	974.64
Feb-20	1992.54
Mar-20	676.735
Grand Total	6762.535



h) Monthly and Annual value of delivery (in Rs. Crores)

Month	Monthly and Annual value of delivery (in Rs. Crores)
Apr-19	2.26
May-19	0.61
Jun-19	0
Jul-19	2.91
Aug-19	0.05
Sep-19	3.01
Oct-19	0.44
Nov-19	1.4
Dec-19	1.14
Jan-20	3.11
Feb-20	6.28
Mar-20	2.06
Grand Total	23.27

i) Monthly and Annual Average Open Interest (OI) (in appropriate units)

Month	Volume	Average Open Interest (OI) (in appropriate units)
Apr-19	15754	5405.5
May-19	19112	5,504.35
Jun-19	17792	6,876.50
Jul-19	22176	9,168.26
Aug-19	20983	10,654.29
Sep-19	14576	8,985.71
Oct-19	21134	10,135.22
Nov-19	21469	10,960.00
Dec-19	22712	9,255.24
Jan-20	25127	11,841.30
Feb-20	22443	9,067.62
Mar-20	21793	5,548.64
Grand Total	245071	



Month	Volume	OI in MT	Annual average volume to open interest ratio
Apr-19	15754	108110	14.57
May-19	19112	126600	15.10
Jun-19	17792	137530	12.94
Jul-19	22176	210870	10.52
Aug-19	20983	223740	9.38
Sep-19	14576	188700	7.72
Oct-19	21134	233110	9.07
Nov-19	21469	230160	9.33
Dec-19	22712	194360	11.69
Jan-20	25127	272350	9.23
Feb-20	22443	190420	11.79
Mar-20	21793	122070	17.85
Grand Total	245071	2238020	10.95

j) Annual average volume to open interest ratio

k) Total number of unique members and clients who have traded during the financial year

Unique members: **47** Unique Clients: **887**

 Ratio of open interest by FPOs/farmers/Hedge/VCP positions to total open interest (Annual average as well as maximum daily value)

Not available

m) Number of unique FPOs / farmers and VCPs/hedgers who traded in the financial year -

Not available

Algorithmic trading as percentage of total trading - Not available

- n) Delivery defaults
 - i) Number of instances
 - ii) Quantity involved
 - iii) Value involved
- 3. Price movements
- a) Comparison, correlation and ratio of standard deviation of Exchange futures price vis-à-vis international futures price (wherever relevant comparable are available)

Not available



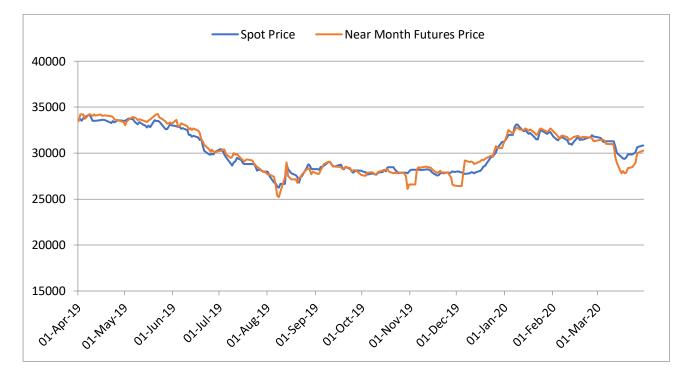


b) Comparison, correlation and ratio of standard deviation of Exchange futures price vis – à - vis international spot price (wherever relevant comparable are available) and domestic spot price (exchange polled price).-

Not available

c) Correlation between exchange futures & domestic spot prices along with ratio of standard deviation.

Correlation	0.9194	
Standard Deviation	2.0764	



d) Correlation between international futures & international spot prices along with ratio of standard deviation (wherever relevant comparable are available).

Not Applicable

 e) Comparison of Exchange polled price and mandi price (in case of agricultural commodities) / other relevant price (in case non - agricultural commodities) at basis centre.

Not Applicable



f) Maximum & Minimum value of daily futures price volatility and spot price volatility along with disclosure of methodology adopted for computing the volatility.

	Futures Price Volatility	Spot Price Volatility
Maximum	7.72%	5.84%
Minimum	-2.6%	-5.3%

g) Number of times the futures contract was in backwardation/contango by more than 4% for the near month contract in the period under review

Backwardation	4
Contango	16

4. Other parameters

a) Qualitative and quantitative measure for Hedge effectiveness ratio and basis Risk (Volatility of Basis) along with disclosure of methodology adopted for such calculations.-

-5.60%

b) Details about major physical markets of the commodity vis – à - vis market reach in terms of availability of delivery centres (information to be provided state – wise and UT - wise)

Not Applicable

c) Details about major physical markets of the commodity and average Open Interest for each month generated from those regions.

Not Applicable

d) Details, such as number and target audience, of stakeholders' awareness programmes carried out by the exchange.

Sr. No.	Month Year	Product	Event Name	Event Date	Location
11 Page					

2	May-19	Steel	"Education Seminar on Steel Contract"	Wednesday May 29,2019	Ahmedabad
8	Jun-19	Steel	"Education Seminar on Steel Contract"	Friday June 21,2019	Kolkata
21	Dec-19	Steel	"Education Seminar on Steel Contract" on at Raipur	Wednesday December 18, 2019	Raipur
22	Dec-19	Steel	STEEL AWARENESS PROGRAMME AT Nagpur	20th December 2019	Nagpur
23	Jan-20	Steel	"Education Seminar on Steel Contract" on at Indore	Thursday January 23,2020	Shreemaya Residency Banquets, Indore
24	Jan-20	Steel	"Education Seminar on Steel Contract" on at Muzaffarnagar,	Monday January 27,2020	Muzaffarna gar,

e) Steps taken / to be undertaken to improve hedging effectiveness of the contracts as well as to improve the performance of illiquid contracts.

Not available

f) Any other information to be disclosed as deemed important by the exchange or as suggested by the PAC-

Not available

Disclaimer: This Report is meant solely for limited purpose. This Report does not constitute a personal recommendation or consider the investment objectives, financial situations, or needs of the entities. This Report is based on information that we consider reliable, but we do not represent that it is accurate or complete, and it should not be relied upon as such. This Report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject ICEX to any registration or licensing requirement within such jurisdiction. ICEX, its directors, officers, analysts or employees do not take any responsibility, financial or otherwise, for any losses or damages that may be sustained due to the investments made or any action taken based on this report. While all efforts have been taken to check the accuracy of the information provided herein, we do not warrant that is free from any technical inaccuracies or typographical errors. ICEX shall not be liable for damages of any kind arising out of or in connection with the use of the information in this publication

