Performance Review of Diamond Contract

Diamond

1. Background

a) Brief about the commodity such as sample picture, lifecycle and various varieties/grade of the commodity found in India:

The word diamond derives from the Greek word "adamas," which means invincible or indestructible. It is modified form of carbon. Under the immense heat and pressure far below the earth's surface, the carbon atoms bond in a unique way that results in diamonds' beautiful and rare crystalline structure.

Diamonds have been valued and coveted for thousands of years. There is evidence that diamonds were being collected and traded in India as early as the fourth century BC. The countries that are the main sources of diamonds have changed over time. India was the world's original source of diamonds, beginning in the 1400s when Indian diamonds began to be sold in Venice and other European trade centers. Then in the 1700s India's diamond supplies declined and Brazil became the world's major source of diamonds, until the late 1800s when a huge diamond reserve was discovered in South Africa. Today, diamonds are mined in many parts of the world.

On an average a diamond will lose about 50% of its original weight when it is cut and polished. Less than 20% of diamonds mined are considered gem-quality and can be used in jewellery.

Diamond value chain consists of Diamond mining (production of rough diamond), manufacturing of cut and polished diamond and diamond jewellery. Further Diamond jewellery consists of jewellery manufacturing and retail sales. China, India and the US are major diamond jewellery consumers, driving rough-diamond demand. Major trading place for rough and cut diamond is Antwerp, Belgium.

Diamond quality is measured mainly on four parameters that is called 4Cs. (Cut, Carat, Colour & Clarity). Other Factors which also contribute in diamond pricing are Crown Angle, Culet Size, Table Width Percentage, Depth Percentage but 4C's decides more than 90% pricing of Diamond. Certified diamonds are priced and traded on per stone basis, based on their carat, colour and other quality parameters. Cut is the most important factor among the 4Cs as it determines the brilliance and beauty of the diamond. Cut itself can make a diamond look bigger, improve the face up color and mask inclusions. Cut, Polish and Symmetry can be of Ideal, Excellent, Very good, Good , Fair, Poor. Etc. Among of these Ideal / Excellent is treated as the best.

Rough diamonds are traded on small packet basis (consisting of 20-30 stones) based on visual inspection. Diamond prices are generally quoted on per carat basis (1 carat=200mg=100cents).For instance, price of a 0.50 carat diamond is quoted as $1400 per carat. In such case, in absolute value terms, the price of such stone would be $1400 * 0.50, or $700. Secondly, diamond prices *per carat*

increases with increase in size or carat of the diamond stone. There is a price bucket (range) for diamond pricing. e.g. (0.30-0.39), (0.40- 0.49), (0.50-0.69), (1.00-1.09) etc.

Consumer demand accounts for 95 % of today's diamond market; demand for investment diamonds accounts for less than 5 % of the total value of polished diamonds.

Diamond can be stored perpetuity. It does not deteriorate in quality over any period of time. Hence, it is a good instrument for storing wealth.

b) Commodity fundamentals and balance sheet as per the following format (to be prepared based on publicly available information on best effort basis):

Table - Fundamentals & Balance sheet

Global Scenario (million carats)	**2019**	**2020**
Opening Stocks	NA	NA
Production	139	111
Others (if any)	NA	NA
Consumption	NA	NA
Closing Stocks	NA	NA

Performance Review of Diamond Contract

Indian Scenario (Thousands carat)	2017-18	2019-20
Opening Stocks	NA	NA
Production	38.15	20.11
Imports	NA	146400
Total Supply		
Exports	30282	20855
Domestic Consumption	NA	NA
Closing Stocks	NA	NA

Performance Review of Diamond Contract

Diamond Imports into India:

S. No.	Country	2017-2018 (INR Crores)	2019-2020 (INR Crores)	%Growth (YOY)	%Share
1	Hongkong	6756.22	7676.73	13.62	62.93
2	United States Of America	2544.72	2164.68	-14.93	17.75
3	United Arab Emirates	2957.56	1440.72	-51.29	11.81
4	Belgium	1021.01	265.26	-74.02	2.17
5	Israel	387.75	209.41	-45.99	1.72
6	Thailand	106.4	126.17	18.58	1.03
7	South Africa	26.2	49.77	89.96	0.41
8	Russia	77.95	43.38	-44.35	0.36
9	Botswana	0	40.37	0	0.33
10	Others	529.82	0	-100	0
	Total	14407.64	12198.22	-15.34	100

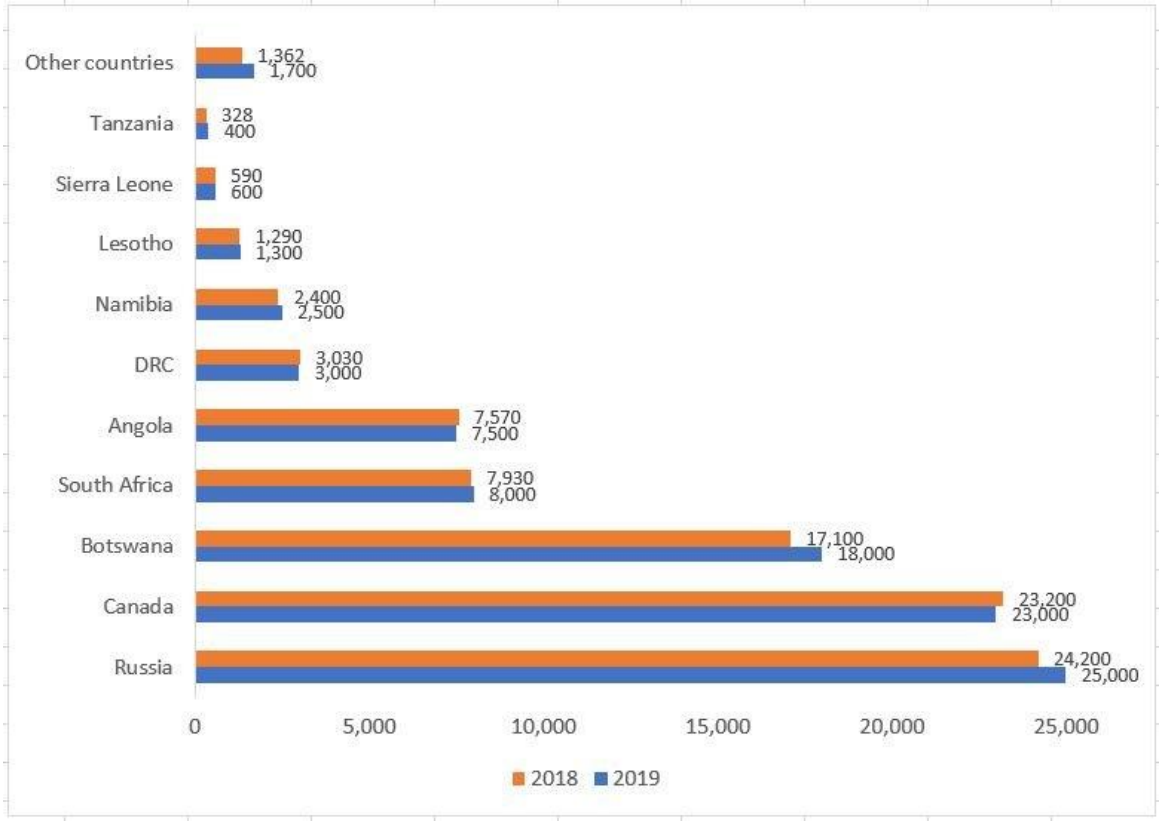
https://gjepc.org/commodity-vs-country-wise-import.php

Diamond Exports from India

S. No.	Country	2017-2018 (INR Crores)	2019-2020 (INR Crores)	%Growth (YOY)	%Share
1	United States Of America	49426.42	49257.42	-0.34	37.31
2	Hongkong	64706.97	45114.92	-30.28	34.17
3	Belgium	9493.61	8821.46	-7.08	6.68
4	United Arab Emirates	9953.41	8544.04	-14.16	6.47
5	Israel	5991.09	5944.59	-0.78	4.5
6	Thailand	3133.11	3965.08	26.55	3
7	Japan	1617.76	2478.42	53.2	1.88
8	Netherland	1701.36	1360.13	-20.06	1.03
9	Switzerland	1320.31	1267.69	-3.99	0.96
10	Others	5554.65	0	-100	0
	Total	152898.69	132017.89	-13.97	100

https://gjepc.org/commodity-vs-country-wise.php

Top 10 Major Producing Countries



Data in thousands of carats of gem diamond.

Source: https://www.minesandmetals.com/2020/05/largest-gem-diamond-producing-countries-in-2019/

Top 10 Major Consuming Countries	**2019**	**2020**
	USA	USA
	China	China
	Europe	Europe
	Japan	Japan
	India	India
	Saudi Arabia	Saudi Arabia
	Others	Others

Performance Review of Diamond Contract

Top 10 Major Exporting Countries	2019
	1. India: US$21.9 billion (20.4% of total exported diamonds) 2. United States: $17.7 billion (16.5%) 3. Hong Kong: $14 billion (13%) 4. Belgium: $11.8 billion (11%) 5. Israel: $11.3 billion (10.5%) 6. United Arab Emirates: $8.2 billion (7.6%) 7. Russia: $3.8 billion (3.5%) 8. Botswana: $3 billion (2.8%) 9. Switzerland: $2 billion (1.9%) 10. United Kingdom: $1.9 billion (1.8%) http://www.worldstopexports.com/diamond-exports-country/

Performance Review of Diamond Contract

	2018	2019
Top 10 Major Importing Countries	1. United States: $24.4 billion (20.8%) 2. 2. India: $19 billion (16.2%) 3. 3. Hong Kong: $18.9 billion (16.1%) 4. 4. Belgium: $15.4 billion (13.1%) 5. 5. United Arab Emirates: $9.2 billion (7.8%) 6. 6. China: $7.8 billion (6.6%) 7. 7. Israel: $7.1 billion (6%) 8. 8. Switzerland: $2.5 billion (2.1%) 9. 9. United Kingdom: $2.2 billion (1.9%) 10. 10. Singapore: $1.7 billion (1.5%) https://howmuch.net/articles/world-map-of-diamond-imports	1. India: US$22 billion (21% of total imported diamonds) 2. United States: $20.2 billion (19.2%) 3. Hong Kong: $17.7 billion (16.9%) 4. Belgium: $10.6 billion (10.1%) 5. China: $7.8 billion (7.5%) 6. United Arab Emirates: $6.8 billion (6.4%) 7. Israel: $4.7 billion (4.5%) 8. Switzerland: $2.4 billion (2.3%) 9. Thailand: $2 billion (1.9%) 10. United Kingdom: $1.9 billion (1.8%) http://www.worldstopexports.com/diamond-imports-by-country/

Top 10 Major Producing States in India	**Previous FY**	**Current FY**
NA	NA	NA

c) Major changes in the policies governing trade in the spot markets of the commodity : No Change
d) Geo political issues in the commodity and its impact on Indian scenario.: No Such development.

Performance Review of Diamond Contract

2. Trading related parameter

a) Monthly and Annual traded volume (quantity in appropriate units)
1 carat

Month	Value in Crores	Volume In Cents
April-19	3,648.72	10481584
May-19	3,686.08	10529296
June-19	1,513.87	4353562
July-19	969.22	2814059
August-19	1,330.64	3736302
September-19	788.24	2205389
October-19	2,436.55	6853054
November-19	2,263.85	6328633
December-19	2,368.60	6645356
January-20	3,346.01	9374244
February-20	3,041.12	8493812
March-20	2,236.36	6011878
Grand Total	**27,629.27**	**77827169**

50 cents:

Month	Value in Crores	Volume in Cents
April-19	28.64	179778
May-19	45.60	285334
June-19	16.35	101672
July-19	0.03	163
August-19	0.02	139
September-19	0.07	460
October-19	0.01	51
November-19	0.00	5
December-19	0.00	3
January-20	0.00	6
February-20	0	0
March-20	0	0
Grand Total	**90.72**	**567611**

30 Cents:

Month	Value in Crores	Volume in Cents
April-19	0.00	2
May-19	0.01	105
June-19	0.00	0.00
July-19	0.00	0.00
August-19	0.00	0.00
September-19	0.00	2
October-19	0.03	288
November-19	0.00	0.00
December-19	0.00	32
January-20	0.00	0.00
February-20	0.00	0.00
March-20	0.00	0.00
Grand Total	**0.04**	**429**

b) Annual traded volume as proportion of total deliverable supply (quantity in appropriate units)
Deliverable Supply

1 Carat	50 Cents	30 Cents
4.06	0.08	0.0000001

c) Annual traded volume as proportion of total annual production (quantity in appropriate units)

40 times

d) Annual average Open interest as proportion of total production

0.32

e) Annual average Open interest as proportion of total deliverable supply

0.02

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

	Monthly and Annual value of delivery (in Crores)		
Month	**30 cents**	**50 cents**	**1 carat**
April-19	0.000207355	28.64	3,648.72
May-19	0.0107025	45.60	3,686.08
June-19	0	16.35	1,513.87
July-19	0	0.03	969.22
August-19	0	0.02	1,330.64
September-19	0.0001862	0.07	788.24
October-19	0.02808832	0.01	2,436.55
November-19	0	0.00	2,263.85
December-19	0.00288	0.00	2,368.60
January-20	0	0.00	3,346.01
February-20	0	0	3,041.12
March-20	0	0	2,236.36
Grand Total	0.042064375	**90.72**	**27,629.27**

g) Monthly and Annual quantity of delivery (in appropriate units)

	Monthly and Annual quantity of delivery (in Cents)		
Month	**30 cents**	**50 Cents**	**1 carat**
April-19		77	1584
May-19	75	46	6553
June-19		30	1421
July-19		251	2717
August-19		173	3599
September-19		97	1555
October-19	183	234	1709
November-19		8	2071
December-19	32	3	2690
January-20		3	67
February-20	14	3	1194
March-20		3	1521
Grand Total	**304**	928	**26681**

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

	Monthly and Annual Value of delivery (in Rs crs)		
Month	**30 cents**	**50 Cents**	**1 carat**
April-19		0.01220698	0.54
May-19	0.007550755	0.00731743	2.28
June-19	0	0.00498795	0.48
July-19	0	0.038634335	0.92
August-19	0	0.027026935	1.22
September-19	0	0.01521318	0.55
October-19	0.016039035	0.03610819	0.59
November-19	0	0.00124979	0.71
December-19	0.00282896	0.00046209	0.94
January-20	0	0.00046602	0.02
February-20	0.00133654	0.000471	0.41
March-20	0	0.000470925	0.54
Grand Total	**0.02775529**	0.144614825	**9.21**

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

	Monthly and Annual Volume			**Monthly and Annual Open Interest**		
Month	**30 cents**	**50 Cents**	**1 carat**	**30 cents**	**50 Cents**	**1 carat**
April-19	2	179778	10481584	0.20	4,838.05	1,14,125.05
May-19	105	285334	10529296	4.30	6,967.17	99,779.17
June-19	0.00	101672	4353562	0.00	2,352.85	57,449.90
July-19	0.00	163	2814059	0.00	68.83	29,827.30
August-19	0.00	139	3736302	0.00	17.95	22,989.90
September-19	2	460	2205389	0.00	77.05	19,798.62
October-19	288	51	6853054	14.91	28.61	21,239.70
November-19	0.00	5	6328633	0.00	0.52	76,149.67
December-19	32	3	6645356	1.52	0.71	66,975.57
January-20	0.00	6	9374244	0.00	0.39	25,632.87
February-20	0.00	0	8493812	0.00	0.48	26,316.00
March-20	0.00	0	6011878	0.00	0.14	69,110.36
Grand Total	**429**	**567611**	**77827169**	20.94	14,352.75	**6,29,394.12**
Total	78395209			6,43,767.81		
Ratio (VO/OI)	121.7755962					

j) Annual average volume to open interest ratio: **121**

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

Unique members: **48**
Unique Clients: **5847**

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

Not APPLICABLE

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

Not Applicable

n) Algorithmic trading as percentage of total trading:

o) Delivery defaults : NO
   i) Number of instances: NA
   ii) Quantity involved: NA
   iii) Value involved: NA

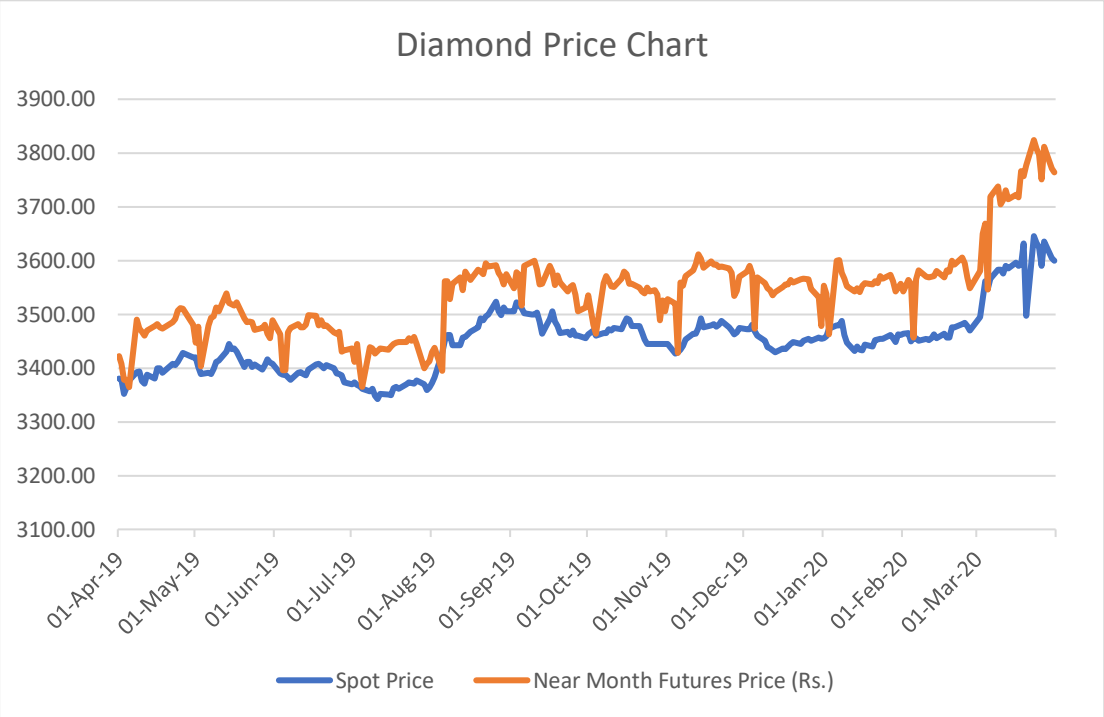
Performance Review of Diamond Contract

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 APPLICABLE

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).



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

Correlation Value between Exchange futures and domestic spot price: 0.92
Ratio of standard deviation: **2.07**

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.

NA

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	4.79%	4.15%
Minimum	-3.8%	-3.4%

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 :

Contago	0
Backwardation	10

4. Other parameters:

a) Hedge effectiveness ratio: **0.84**

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).

Major Markets of Diamond: Mumbai and Surat. Delivery of ICEX diamond is permitted only at Surat.

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

Not to be disclosed.

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

Not available.

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

Not to be disclosed.

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

Not Applicable

.

Disclaimer: This Report is meant solely for limited purpose . This Report does not constitute a personal recommendation or take into account the particular 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 on the basis of 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.