MCX
METAL & ENERGY
Trade with Trust

MCX INVESTOR PROTECTION FUND

ZINC
HEDGING BROCHURE


...ZINC IS THE FOURTH MOST COMMON METAL...ZINC IS THE FOURTH MOST COMMON METAL...ZINC IS THE FOURTH MOST COMMON METAL

OVERVIEW

Zinc is a metallic mineral known since historic times. Zinc was known to the Romans but rarely used. Zinc is a bluish white lustrous metal. It is normally covered with a white coating on exposure to the atmosphere. Zinc is the fourth most common metal in use, after iron, aluminium, and copper. Zinc can be recycled indefinitely, without loss of its physical or chemical properties. It is present in a wide variety of foods, and found particularly in association with protein foods. Roughly 50 per cent of all metallic zinc produced today is used to galvanise other metals, such as steel or iron, to prevent corrosion. Large quantities of zinc is used to produce die castings, which are used extensively by the automotive, electrical, and hardware industries. Zinc is also used as a chemical compound in rubber, ceramics, paints, and agriculture. Zinc coating is widely used to protect finished products ranging from structural steelwork for buildings and bridges to nuts, bolts, strips, sheets, wires, and tubes.

PRICE RISK MANAGEMENT

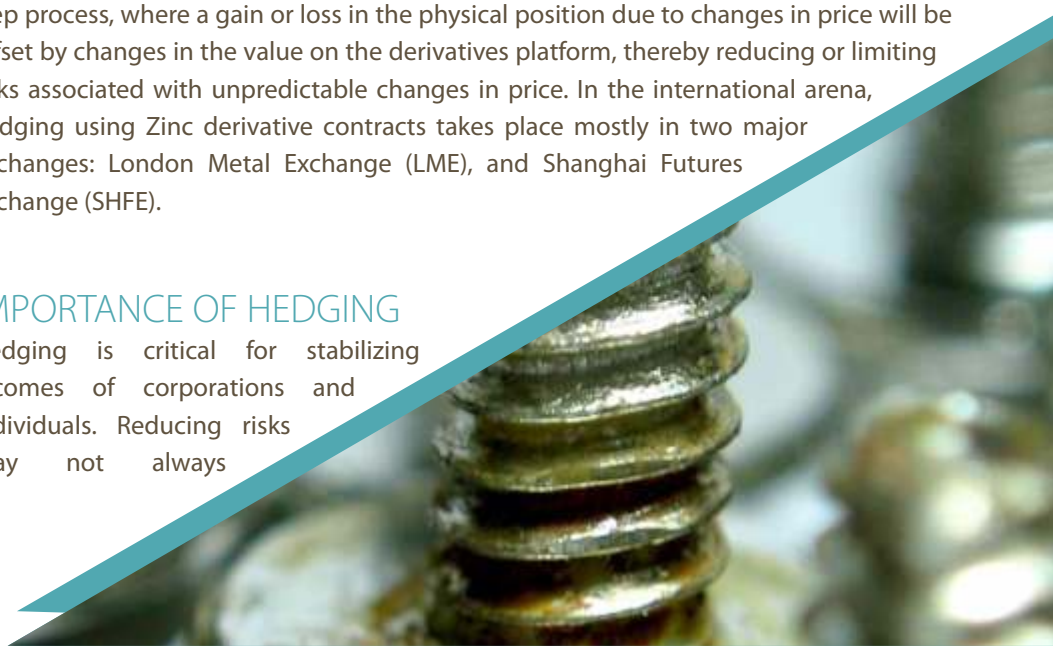
Risk management techniques are critical for participants, such as producers, exporters, marketers, processors, and SMEs. Modern techniques and strategies, including market-based risk management financial instruments like 'Zinc Futures' and 'Zinc Options', offered on the exchange derivative platform can improve efficiencies and consolidate competitiveness through price risk management. The importance of risk management cannot be overstated; an expert committee set up by the government found that commodity derivatives exchanges are efficiently fulfilling their functions of price discovery and price risk management.

HEDGING MECHANISM

Hedging is the process of reducing or controlling risk. It involves taking equal and opposite positions in two different markets (such as physical and derivative market), with the objective of reducing or limiting risks associated with price change. It is a two-step process, where a gain or loss in the physical position due to changes in price will be offset by changes in the value on the derivatives platform, thereby reducing or limiting risks associated with unpredictable changes in price. In the international arena, hedging using Zinc derivative contracts takes place mostly in two major exchanges: London Metal Exchange (LME), and Shanghai Futures Exchange (SHFE).

IMPORTANCE OF HEDGING

Hedging is critical for stabilizing incomes of corporations and individuals. Reducing risks may not always



Zinc is the fourth most common metal. Zinc, sometimes called spelter, is a shiny bluish grey metal. When cut, zinc has a whitish-grey colour. It can be melted on a cooking stove. It boils at a low temperature for a metal. It is not magnetic. When heated a little, it becomes very flexible. If heated more, it becomes very brittle. It forms alloys easily with other metals. Zinc is not found as a metal in the earth's crust and is only found as zinc compounds. Sphalerite, a mineral that is made of zinc sulfide, is the main ore of zinc. Zinc ore is normally found with copper and lead ores.

(Source: Wikipedia)

improve earnings, but failure to manage risk will have direct repercussion on the risk bearers' long-term income. To gain most from hedging, it is essential to identify and understand the objectives behind hedging. A good hedging practice, hence, encompasses efforts by companies to get a clear picture of their risk profile and benefit from hedging techniques.

PARTICIPANT HEDGERS

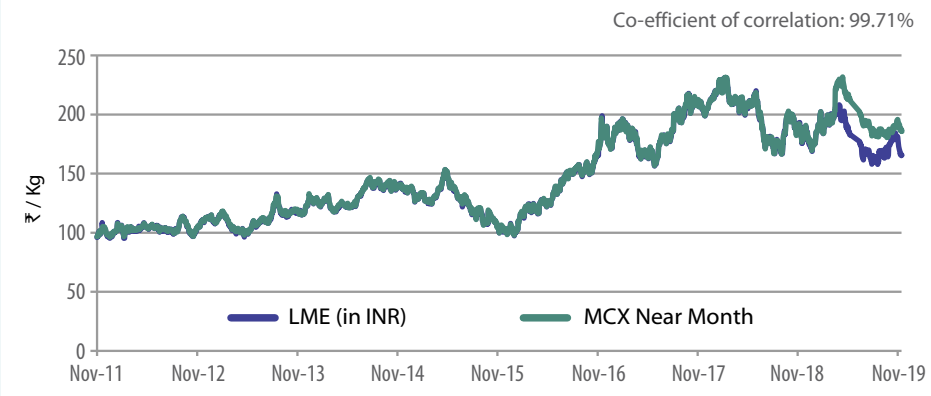
Commodity Exchanges offer a transparent hedging platform, besides bringing about economic and financial efficiencies by de-risking production, processing, and trade. Commodity Derivative Exchanges' engagement has led to large efficient gains in supply chains, with exporters gaining a larger share of global prices, and producers getting better prices and much better access to markets. All those who have or intend to take positions in physical Zinc are participant hedgers. These are:

- Importers
- Exporters
- Refiners
- Processors
- Stockists
- SMEs

FACTORS AFFECTING ZINC PRICES

- Prices ruling in the international markets
- Indian Rupee and US Dollar exchange rates
- Economic factors: industrial growth, global financial crisis, recession, and inflation
- Commodity-specific events: construction of new production facilities or processes, new uses or the discontinuance of historical uses, unexpected mine or plant closures (natural disaster, supply disruption, accident, strike, and so forth), and industry restructuring—all affect metal prices
- Government trade policies (implementation or suspension of taxes, penalties, and quotas)
- Geopolitical events
- As societies develop, their demand for metal increases based on their current economic position, which could also be referred as 'National Economic Growth Factor'

PRICE MOVEMENT



HEDGING EXPERIENCES

1. Siemens India Limited. "The company uses Commodity Future Contracts to hedge against fluctuation in commodity prices." (Source- Annual Report, 2018)

2. Aurubis. (Aurubis is a leading integrated copper group and the world's largest copper recycler, with production sites in US, Europe and an extensive service and sales system for copper products in Europe, Asia and North America).

"The Aurubis Group is exposed to commodity price risks. Non-ferrous metals futures contracts are entered into in order to mitigate price risks.

For this purpose, incoming and outgoing metal quantities from underlying transactions are offset against each other each day and remaining open positions are squared by means of metal exchange ransactions."

(Source: Annual report 2017-18)

3. Antofagasta PLC. Antofagasta is a Chilean copper mining group with significant by-product production and interests in transport and water distribution. "The group monitors the commodity markets closely to determine the effect of price fluctuations on earnings, capital expenditures, and cash flows. From time to time, the group uses derivative instruments to manage its exposure to commodity price fluctuations, where appropriate." (Source: Antofagasta plc, Annual Report and Financial Statements 2018)

FACTS ON HEDGING

- Understand the risk profile and appetite while formulating clear hedging objectives
- Hedging can shield the revenue stream, profitability, and balance sheet against adverse price movements
- Hedging can maximize shareholder value
- Common avoidable mistake is to book profits on the hedge while leaving the physical leg open to risk
- Hedging provides differentiation to companies in a highly competitive environment
- Hedging also significantly lowers distress costs in adverse circumstances confronting a company

DOMESTIC SCENARIO & OUTPUT

- India has an excellent world class open-pit zinc mine in Rajasthan called Rampur Agucha. This mine produces world class zinc. The concentrate is produced in India, refined and used for domestic consumption. The rest is exported.
- Zinc is a freely importable commodity according to the Govt. of India norms.
- In India, the main producers of zinc are Hindustan Zinc Limited (HZL), and Binani Zinc Limited (BZL, a private sector enterprise).
- Roughly, about 77 per cent of the zinc consumed goes into the hot dip galvanizing sector, followed by alloys (10percent), oxides (5 per cent), dry cell batteries (3 per cent), zinc dust (3 per cent) and others (2 per cent).
- Hindustan Zinc Limited produced 6,96,283 MT of zinc during FY 2018-19. *(Source: Monthly Summary on Non-Ferrous Minerals and Metals, Ministry of Mines, Government of India, March 2019)*

ZINC HEDGING

- ABC Galvanizer is a galvanizing company exporting galvanized sheets. The zinc market has been extremely unpredictable due to price volatility, which is a reflection of international and domestic factors. ABC Galvanizer requires zinc in large quantities, which are actually lifted based on the prevailing prices.
- The company procures "Just-in-Time" to meet production schedule—which means input prices may change!
- Zinc prices are influenced by international and domestic factors, and currency movements.
- The time lag in procurement from physical market exposes ABC Galvanizer to very high risk, as zinc prices are highly volatile.
- The company hedges on the futures platform to effectively manage its commodity and currency risk.



HEDGING ILLUSTRATION

GOING LONG: Scenarios where prices either rise or fall (All prices are in ₹/kg)

The Company, ABC Galvanizer buys Zinc and has put forward the following facts.

1. The company decides on 12th October to procure 50 tonnes of Zinc.
2. It has structured its purchase, such that 10 tonnes will be physically bought every week at the prevailing price.
3. The first purchase of 10 tonnes is bought physically on 12th October 2014. Thus, the first lot does not undergo any price change.
4. The remaining 40 tonnes will be bought in subsequent weeks in lots of 10 tonnes, every week at ruling prices.
5. The company hedges for 40 tonnes.

DATE	PHYSICAL MARKET	FUTURES PLATFORM	OPEN INTEREST in lots on FUTURES MARKETS
12th October	BUY 10 Tonnes	BUY 40 lots of Zinc Mini Futures Contract of 1 Tonne each	40
19th October	BUY 10 Tonnes	SELL 10 lots of Zinc Mini Futures	30
26th October	BUY 10 Tonnes	SELL 10 lots of Zinc Mini Futures	20
2nd November	BUY 10 Tonnes	SELL 10 lots of Zinc Mini Futures	10
9th November	BUY 10 Tonnes	SELL 10 lots of Zinc Mini Futures	0

DATE	ZINC SPOT PRICES	Zinc Mini Futures Prices (expiry 30th November 201X)
12th October	105	106
19th October	108	109
26th October	101	102
2nd November	113	114
9th November	102	103

DATE	SPOT MARKET ACTION		FUTURES MARKET ACTION		Profit/Loss per kg in FUTURES MARKET	NET PURCHASE PRICE/KG
12th October	BUY	10 MT @ 105	BUY	40 lots @ 106		105
19th October	BUY	10 MT @ 108	SELL	10 lots @ 109	3 (Profit)	105(108-3)
26th October	BUY	10 MT @ 101	SELL	10 lots @ 102	4 (Loss)	105(101+4)
2nd November	BUY	10 MT @ 113	SELL	10 lots @ 114	8 (Profit)	105(113-8)
9th November	BUY	10 MT @ 102	SELL	10 lots @ 103	3 (Loss)	105(102+3)

EXPLANATION

The Treasury Team of ABC Galvanizer, buys 40 lots of Zinc mini (1 lot = 1 tonne) 30th November contract on 12th October and squares the position in a staggered manner in subsequent weeks, whenever the Company lifts zinc from the physical market at the prevailing spot market price. The company by hedging its position and making a staggered exit from the futures contract makes the net buying price at ₹105 per kg, which is the budgeted price.
Objective is to lock price. And, NOT profit from the rise/ fall in prices.

APPRECIATING THE BENEFITS OF HEDGING – using Call options on futures

Zinc stakeholders, such as risk galvanizer, on entering into an agreement with customers, often face the risk of an unexpected rise in zinc price when they would procure zinc for processing, which cannot be passed on to the customers. By buying a call option, they can hedge against such a risk, as the following example shows.

THE SITUATION

On 25th October, ABC Galvanizer got an order to be delivered in the 1st week of December, for which the selling price has been fixed based on current spot prices. The company is thus exposed to a risk of rise in zinc prices in the near future. On October 25, the spot price of zinc was ₹199 per Kg. To hedge himself against the expected price increase, treasury department of ABC Galvanizer buys Zinc Call Option on future expiring on the November 27, at the strike price of 200 per Kg for a premium of ₹2. The underlying to this option contract is Zinc November Futures contract trading at ₹200 per Kg.

The following two scenarios are possible at options expiry:



SCENARIO 1: IF ZINC PRICES WERE TO RISE

PRICE & ACTION	Zinc Spot Prices (₹/Kg)	Zinc Nov. Futures Prices (₹/Kg)	Zinc Nov. CALL options (Underlying: Zinc Nov. Futures Contract)	CALL OPTION PREMIUM (₹)
Traded Price on October 25	199	200	200 (strike price)	Out:2
Action on October 25	–	–	Buy Call option contract by paying premium	
Position in market	Nil	Nil	Long 1 lot	
Close Price on November 27 (Option expiry day)	205	206	200 (strike price)	6
Action on November 27 after close of market hours	–	On exercise, the call options contract will devolve into a long position in the underlying Zinc futures contract at 200 (strike price)		
Position on November 27 post-devolvement	–	Long 1 lot	Nil	–
Traded Price on November 28	206	207	–	–
Action on November 28	Buy in physical market	Sell the long open futures position		–
Flow of money	Out: 206	In: 7 (207 – 200)	–	Out: 2

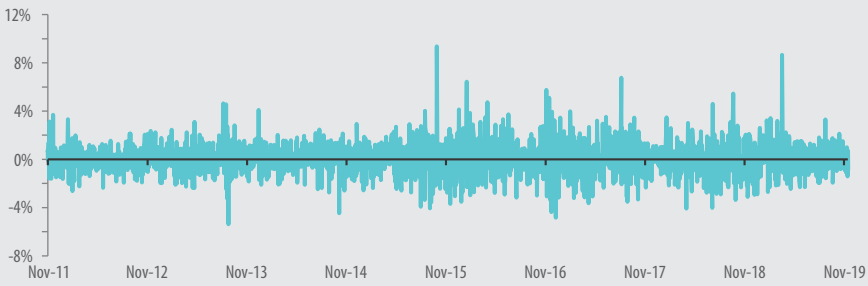
Thus, the net purchase price of Zinc on November 28 is ₹206 (Physical market purchase) – ₹6 (gains in futures market on devolvement of options position) + ₹2 (option premium paid) = ₹202 per Kg, which is close to spot prices prevailing on October 25.

Thus, by buying a 'Call' Option on future and allowing it to devolve into futures position on expiry, ABC Galvanizer was able to protect its business margins, in the event of a rise in prices.



Average Daily Volatility of Zinc*

*MCX near month prices



YEAR	2012	2013	2014	2015	2016	2017	2018	2019*
ANNUALIZED VOLATILITY	14%	18%	17%	24%	26.1%	23%	23%	20%

*till 27 Nov., 2019



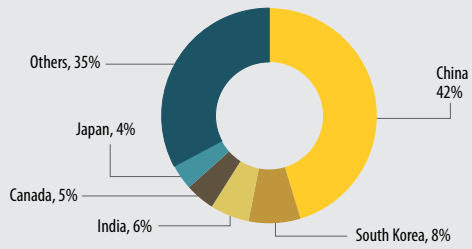
SCENARIO 2: IF ZINC PRICES WERE TO FALL

PRICE & ACTION	Zinc Spot Prices (₹/Kg)	Zinc Oct. Futures Prices (₹/Kg)	Zinc Nov. CALL options (Underlying: Zinc Nov. Futures Contract)	CALL OPTION PREMIUM (₹)
Traded Price on October 25	199	200	200 (strike price)	Out:2
Action on October 25	–	–	Buy Call option contract by paying premium	
Position in market	Nil	Nil	Long 1 lot	
Close Price on November 27 (Option expiry day)	194	195	200 (strike price)	0
Action on November 27 after close of market hours	–	As strike price of the Call option contract is more than the underlying futures prices, it expires worthless.		
Position on November 27 post-devolvement	–	–	–	–
Traded Price on November 28	193	–	–	–
Action on November 28	Buy in physical market		–	––
Flow of money	Out: 193	–	–	Out: 2

Net purchase price of zinc on November 28 is ₹193 (Physical market purchase) + ₹2 (option premium paid) = ₹195 per Kg, much less than the spot prices prevailing on October 25.

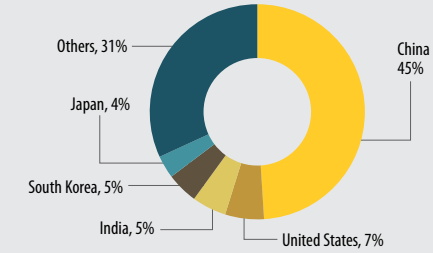
Thus, by hedging risk of rise in zinc prices using a Zinc Call Options Contract, a galvanizer would just not be protected against price rise but would also benefit from fall in zinc prices, if any, in form of lower net purchase price.

Country/Region-wise share in global zinc slab production (2018)



Source: World Bureau of Metals Statistics / Bloomberg

Country/Region-wise share in global zinc slab demand (2018)



Source: World Bureau of Metals Statistics / Bloomberg



APPRECIATING THE BENEFITS OF HEDGING – using Put options on futures

Zinc market stakeholders often store the commodity before processing and selling to prospective customers. They, therefore, face the risk of a fall in zinc prices. By buying a put option, they can hedge against such a risk, as the following example shows.

THE SITUATION

On March 25th, the spot price of zinc is ₹199 per Kg. Bharat Zinc has procured 1 kg of zinc stock for sale at spot price. A regular customer of Bharat zinc agreed buy the stock by end of April at the then prevailing zinc prices. As a result, company faces a risk of fall in zinc prices. Hence, to hedge against this, company buys Zinc Put Options expiring on April 27th at the strike price of 200 per Kg for a premium of ₹2. The underlying to this option contract is Zinc April futures contract trading at ₹200 per Kg.

The following two scenarios are possible at options expiry:



SCENARIO 1: IF ZINC PRICES WERE TO FALL

PRICE & ACTION	Zinc Spot Prices (₹/Kg)	Zinc Apr. Futures Prices (₹/Kg)	Zinc Nov. PUT options (Underlying: Zinc Apr. Futures Contract)	PUT OPTION PREMIUM (₹)
Traded Price onMarch25	199	200	200 (strike price)	Out:2
Action on March 25	–	–	Buy Call option contract by paying premium	
Position in market	Nil	Nil	Long 1 lot	
Close Price on April 27 (Option expiry day)	205	206	200 (strike price)	6
Action on April 27 after close of market hours	–	On exercise, the call options contract will devolve into a long position in the underlying Zinc futures contract at 200 (strike price)		
Position on April27 post-devolvement	–	Long 1 lot	Nil	–
Traded Price on April 28	206	207	–	–
Action on April 28	Buy in physical market	Sell the long open futures position		–
Flow of money	Out: 206	In: 7 (207 – 200)	–	Out: 2

Thus, the net sale price of zinc on April 28 is ₹194 (Physical market sale) + ₹6 (gains in futures market on devolvement of options position) – ₹2 (option premium paid) = ₹198 per Kg, which is close to spot prices prevailing on March 25.

Thus, by buying a 'Put' Option and allowing it to devolve into futures position on expiry of the Options contract, Bharat Zinc was able to protect its business margins, in the event of a fall in prices.





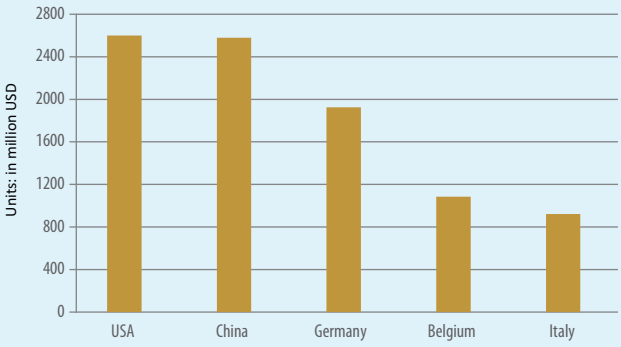
SCENARIO 2: IF ZINC PRICES WERE TO RISE

PRICE & ACTION	Zinc Spot Prices (₹/Kg)	Zinc Nov. Futures Prices (₹/Kg)	Zinc Nov. PUT options (Underlying: Zinc Apr. Futures Contract)	PUT OPTION PREMIUM (₹)
Traded Price on March 25	199	200	200 (strike price)	Out:2
Action on March 25	–	–	Buy Put option contract by paying premium	
Position in market	Nil	Nil	Long 1 lot	
Close Price on April 27 (Option expiry day)	205	206	200 (strike price)	0
Action on April27 after close of market hours	–	As strike price of the Put option contract is less than the underlying futures prices, it expires worthless.		
Position on April 27 post-devolvement	–	Nil	Nil	–
Traded Price on April 28	206	–	–	–
Action on April 28	Sell in physical market		–	–
Flow of money	Out: 206	–	–	Out: 2

Thus, the net sale price of zinc on April 28 is ₹206 (Physical market sale) – ₹2 (option premium paid) = ₹204 per Kg, which is much more than the spot prices prevailing on March 25.

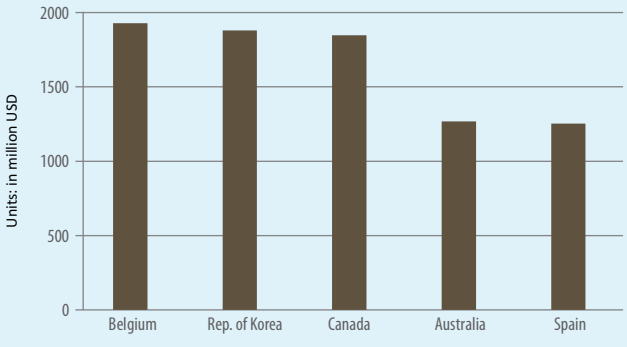
Thus, by hedging risk of fall in zinc prices using a Zinc Put Options Contract, Bharat Zinc would just not be protected against price fall, but would also benefit from rise in zinc prices, if any, in form of higher net sale price.

LEADING ZINC IMPORTING COUNTRIES, 2018



Source: UN Comtrade and UN Service Trade

LEADING ZINC EXPORTING COUNTRIES, 2018



Source: UN Comtrade and UN Service Trade

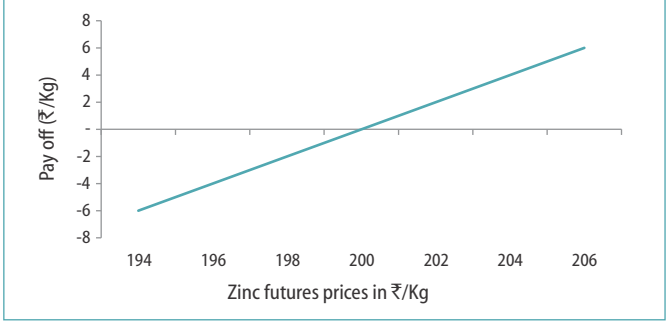


FUTURES AND OPTIONS PAYOFFS

A. Commodity Futures

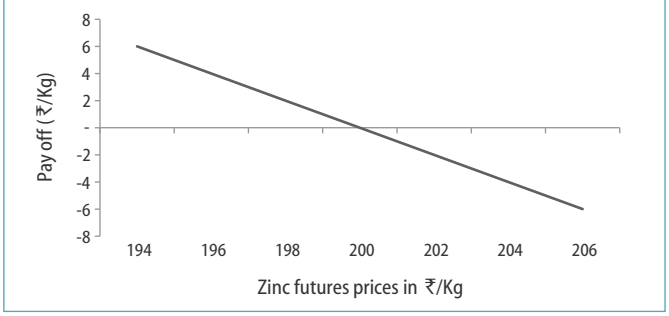
1. Assume a market participant buys a zinc futures contract at ₹200 per Kg. His pay-off on his futures position with change in zinc futures prices is as shown below.

BUYER OF ZINC FUTURES PAY-OFF



2. Assume a market participant sells a zinc futures contract at ₹200 per Kg. His pay-off on his futures position with change in zinc futures prices is as shown below.

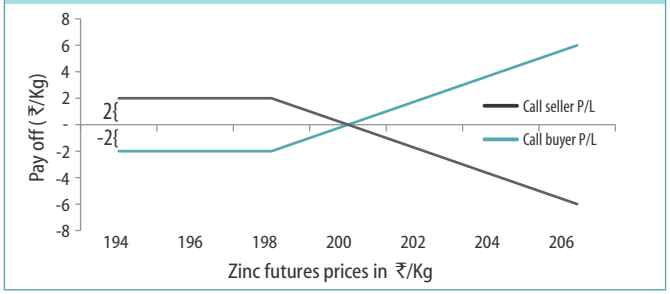
SELLER OF ZIN FUTURES PAY-OFF



B. Commodity Options on Futures

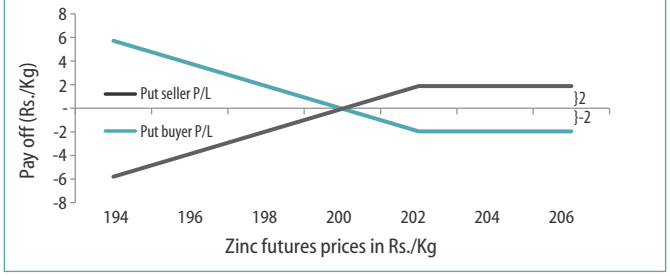
3. Assume a market participant buys a zinc call option contract with a strike price at ₹200 per Kg at a premium of ₹2. His pay-off on his call option contract with change in the underlying zinc futures prices is as shown below. Pay-off for call option seller is also shown in same figure.

ZINC CALL OPTION PAY-OFF



4. Assume a market participant buys a Zinc put option contract with a strike price at ₹200 per Kg and premium at ₹2. His pay-off on his put option contract with change in the underlying zinc futures prices is as shown below. Pay-off for put option seller is also shown in same figure.

ZINC PUT OPTION PAY-OFF



REGULATORY BOOSTS FOR HEDGERS

1. Income tax exemptions for hedging: Commodity derivatives transactions undertaken in recognized exchanges enjoy benefits under the ambit of Section 43(5) of the Income Tax Act, 1961 and the gains/ losses from such transactions are not considered 'speculative'. This effectively means that business profits/ losses can be offset by losses profits undertaken in commodity derivatives transactions. This enhances the attractiveness of risk management on recognized commodity derivative exchanges and incentivizes hedging. Hedgers are no longer forced to undertake physical delivery of commodities in order to prove that their transactions are in the nature of hedging and not 'speculation'.

2. Limit on open position as against hedging: This enables hedgers to take positions to the extent of their exposure on the physical market and are allowed to take position over and above prescribed position limits on approval by the exchange.

A comprehensive Hedge Policy Document is available at
https://www.mcxindia.com/docs/default-source/market-operations/trading-surveillance/reports/hedgepolicy.pdf?sfvrsn=2

World Refined Zinc Supply and Usage 2014 - 2019									000 Tonnes
	2014	2015	2016	2017	2018	2019			
						Jun	Jul	Aug	Sep
Mine Production	13,419	13,624	12,601	12,739	12,785	1,107.1	1,078	1,119.9	1,106.9
Metal Production	13,395	13,801	13,565	13,392	13,270	1,144.6	1,125.8	1,157.4	1,171.4
Metal Usage	13,674	13,627	13,665	13,863	13,793	1,122.8	1,157.4	1,184.4	1,192.8

Source - International lead and zinc study group

SALIENT SPECIFICATIONS OF MCX ZINC FUTURES CONTRACTS

SYMBOL	**ZINC**	**ZINCMINI**
Description	ZINCMMMYY	ZINCMINIMMYY
TRADING		
Trading period	Mondays through Fridays	
Trading session	Monday to Friday: 09.00 a.m. to 11.30 p.m. / 11.55 p.m. (based on US daylight saving time period)	
Last Trading Day	Last calendar day of the contract expiry month. If last calendar day is a holiday or Saturday then preceding working day.	
Trading unit	5MT	1MT
Quotation/Base value	₹ / kg	
Price Quote	Ex-Warehouse Thane district (excludes only GST)	
Maximum order size	100 MT	
Tick size (minimum)	5 paise / kg	
Daily price limits	The base price limit will be 4%. Whenever the base daily price limit is breached, the relaxation will be allowed upto 6% without any cooling off period in the trade. In case the daily price limit of 6% is also breached, then after a cooling off period of 15 minutes, the daily price limit will be relaxed upto 9%. In case price movement in international markets is more than the maximum daily price limit (currently 9%), the same may be further relaxed in steps of 3% informed to Regulator immediately.	
Initial margin*	Minimum 4% or based on SPAN whichever is higher	
Extreme Loss Margin	Minimum 1%	
Additional and/or special margin	In case of additional volatility, an additional margin (on both buy-side & sell-side) and/or special margin (on either buy-side or sell-side) at such percentage, as deemed fit; will be imposed in respect of all outstanding positions.	
Maximum allowable open position**	For individual clients: 7000 MT for all contracts or 5% of the market-wideopen position, whichever is higher, for all zinc contracts combined together For a member collectively for all clients: 70,000 MT or not more than 20% of the market-wide open position, whichever is higher, for all zinc contracts combined together	
DELIVERY		
Delivery Unit	5 MT with tolerance limit of + / -10%	1 MT with tolerance limit of +/- 10%
Delivery period margin***	Delivery period margins shall be higher of: a. 3% + 5 day 99% VaR of spot price volatility Or b. 25%	
Delivery Center(s)	Ex-Warehouse at Thane district in Maharashtra	
Quality Specifications	Primary Special High-Grade Zinc with minimum purity of 99.995%. Only LME approved brands will be accepted.	
Due Date Rate:	The Final Settlement Price (FSP) shall be arrived at by taking the simple average of the last polled spot prices of the last three trading days viz.,E0 (expiry day), E-1 and E-2. On the day of expiry the trading shall be allowed up to 5pm.	
Delivery Logic	Compulsory Delivery	

*The Margin Period of Risk (MPOR) shall be 2 days in accordance with SEBI Circular no. SEBI/HO/CDMRD//DRMP/CIR/P/2016/77 dated September 01, 2016 accordingly, the initial margin shall be scaled up by root 2.
**As per SEBI directive CIR/CDMRD/DRMP/01/2015 dated October 1, 2015 | ***As per SEBI directive SEBI/HO/CDMRD/DRMP/CIR/P/2016/77 dated Sep 01, 2016

Note: Please refer to the exchange circulars for latest contract specifications

MCX also offers a Zinc Mini (1 MT) Futures contract. Refer to MCX circular for its Contract Specifications

SALIENT FEATURES OF MCX ZINC OPTIONS CONTRACT WITH ZINC (5MT) FUTURES AS UNDERLYING

Symbol	ZINC
Underlying	Underlying shall be Zinc Futures contract traded on MCX
Expiry Day (Last Trading Day)	Three business days prior to the first business day of Tender Period of the underlying futures contract.
Trading Period	Monday through Friday (9.00 a.m. to 11.30 / 11.55 p.m.#) | Trading Unit: One MCX Zinc futures contract
Underlying Price Quote	Ex-Warehouse Thane district (excludes only GST)
Strikes	7 In-the-money, 7 Out-of-the-money and 1 Near-the-money. (15 CE and 15 PE). The Exchange, at its discretion, may introduce additional strikes, if required.
Strike Price Intervals	₹2.50 | Tick Size (Minimum Price Movement): ₹0.01
Daily Price Limit	The upper and lower price band shall be determined based on statistical method using Black76 option pricing model and relaxed considering the movement in the underlying futures contract. In the event of freezing of price ranges even without a corresponding price relaxation in underlying futures, if deemed necessary, considering the volatility and other factors in the option contract, the Daily Price Limit shall be relaxed by the Exchange.
Margins	The Initial Margin shall be computed using SPAN (Standard Portfolio Analysis of Risk) software, which is a portfolio based margining system. To begin with, the various risk parameters shall be as under: A. Price Scan Range – 3.5 Standard Deviation (3.5 sigma) B. Volatility Scan Range – 5 % C. Short Option Minimum Margin – Minimum of 2.5% subject to Margin Period of Risk (MPOR) (i.e. 2.5% *$\sqrt{2}$ currently) D. Extreme Loss Margin – 1.25% (to be levied only on short option positions) E. Premium of buyer shall be blocked upfront on real time basis. The Margin Period of Risk (MPOR) shall be at least two days. Parameters would be reviewed and changed, if required
Mark to Market	The option positions shall be marked to market by deducting / adding the current market value of options positions (positive for long options and negative for short options). Mark to Market gains and losses would not be settled in Cash for Options Positions.
Maximum Allowable Open Position	Position limits for options would be separate from the position limits applicable on futures contracts. For client level: 14,000 MT or 5% of the market wide open position, whichever is higher - For all Zinc Options contracts combined together. For a member level: 1,40,000 MT or 20% of the market wide open position, whichever is higher - For all Zinc Options contracts combined together. Upon expiry of the options contract, after devolvement of options position into corresponding futures positions, open positions may exceed their permissible position limits applicable for future contracts. Such excess positions shall have to be reduced to the permissible position limits of futures contracts within two trading days.
Exercise Mechanism at expiry	All option contracts belonging to 'Close to the money' (CTM)* option series shall be exercised only on 'explicit instruction' for exercise by the long position holders of such contracts. All In the money (ITM) option contracts, except those belonging to 'CTM' option series, shall be exercised automatically, unless 'contrary instruction' has been given by long position holders of such contracts for not doing so. The ITM option contract holders and the CTM option series holders who have exercised their options by giving explicit instruction, shall receive the difference between the Settlement Price and Strike Price in Cash as per the settlement schedule. In the event contrary instruction are given by ITM option position holders (other than those belonging to CTM option series), the positions shall expire worthless. All CTM positions which are not exercised shall also expire worthless. All Out of the money (OTM) option contracts, except those belonging to 'CTM' option series, shall expire worthless. In the event the OTM position holders, which are in CTM option series, exercise their option positions, shall be required to pay and settle the difference between strike price and settlement price as per the settlement schedule. All devolved futures positions shall be considered to be opened at the strike price of the exercised options. In case the DSP is exactly midway between two strike prices, then immediate two option series having strike prices just above DSP and immediate two option series having strike prices just below DSP shall be referred as 'Close to the money' (CTM) option series.
Due Date Rate (Final Settlement Price)	Daily settlement price of underlying futures contract on the expiry day of options contract.

Note: Please refer to the exchange circulars for latest contract specifications. | #based on US daylight saving time period

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