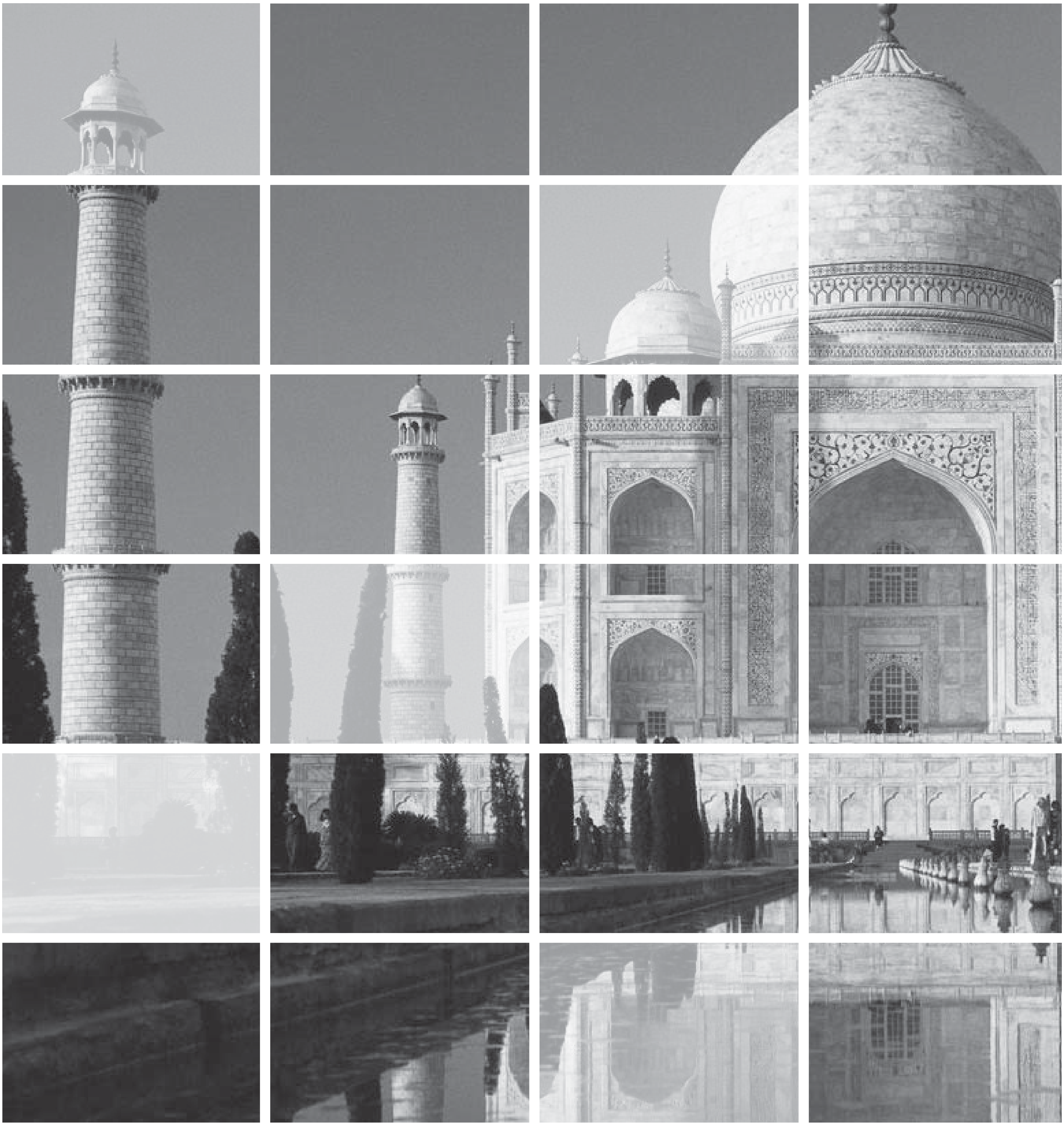


Trading INR Options on DGCX

DGCX

بورصة دبي للذهب والسلع

DUBAI GOLD & COMMODITIES EXCHANGE

DGCX Options on INR/US$ Futures Contract

Options on INR futures open the door to a host of versatile trading strategies; by using options alone, or in combination with INR futures, strategies can be found to cover virtually any risk profile or time horizon.

Options on INR futures provide:

- The ability to hedge cash and futures positions against an adverse INR price direction without foregoing the benefits of favorable price movements
- The availability of an insurance hedge at many different levels of cost and degrees of protection
- A means for businesses and investors to act aggressively or conservatively on views about the direction and volatility of INR prices

Because the underlying instrument of the options contract is a futures contract, market participants can use options to cover themselves against volatile swings in INR futures prices, just as futures can be used to protect against volatile moves in the price of the underlying INR spot market.

Dubai Gold & Commodities Exchange

Dubai Gold & Commodities Exchange (DGCX) commenced trading in November 2005 as the Middle East's first commodity derivatives exchange and clearing house, and has become today the largest derivatives exchange and clearing house in the region.

Our range of futures contracts offer market participants, such as producers, manufacturers, end users and trading houses, with a sophisticated means of hedging their price risk exposure. Such price risk management has previously been unavailable to producers in the Middle East. In addition, DGCX provides trading opportunities to financial communities and investment houses in both the Middle East and around the globe who wish to access the growing asset class of commodity and currency derivatives.

Benefits of trading on DGCX include:

- Access to the key global economic indicators of precious metal, base metal, energy and currency sectors
- Guaranteed settlement and reduced counterparty risk provided by Dubai Commodities Clearing Corporation (DCCC), a 100% subsidiary of DGCX
- The advantage of transacting and clearing business within the UAE and thus the local taxation and regulatory regimes
- A simple fee structure - one fee for all participants. All participants also pay the same margin, whether commercial or non-commercial entities
- An opening to both regional and international liquidity pools
- Robust risk management and surveillance systems
- Uninterrupted trading hours from 8:30am – 11:30pm (GMT +4, IST+1.5)
- Regulated by the Emirates Securities & Commodities Authority (ESCA)

DGCX Indian Rupee Futures

Launched in 2007, the DGCX Indian Rupee futures contract is the only one of its kind outside of India and is therefore available to a wide range of international participants and Non Resident Indians. The Indian Rupee futures contract offers trading opportunities and an ideal hedging mechanism for the Indian currency versus the US Dollar.

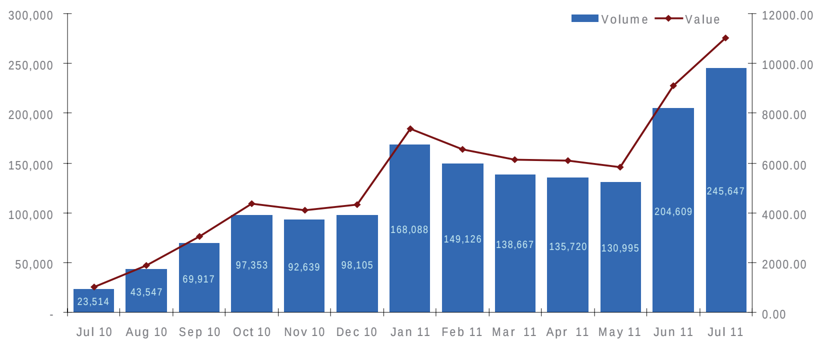
With extended trading hours from 8.30am to 11.30pm Dubai Time (10.00am to 1.00am Indian Standard Time) and an ideal contract size, the DGCX market allows easier fungibility with the unregulated over-the-counter Non Deliverable Forwards (NDF) market.

The DGCX Indian Rupee futures contract has many advantages for market participants:

- Highly liquid and tighter bid and offer spreads
- Contract size of two million Rupee (approx. US $45,000 depending on market price).
- Quarter paisa tick size
- Cash settled in US dollars, based on the reference rate published by the Reserve Bank of India on the last day of trading
- Monthly expiries available up to twelve months forward
- Simple fee and margin structure. The current minimum initial margin is US $400 per contract (subject to change)
- Accessible via 180 broker members and tradable electronically via the DGCX 'Trader Work Station' or a range of ISVs

DGCX Indian Rupee futures monthly trading volumes (July 2010 to July 2011)

DGCX INR Rupee futures volumes have grown rapidly over the past 12 months from 23,514 in July 2010 to 245,647 contracts in July 2011, the highest ever monthly trading volumes.



What is an INR Option?

An Indian Rupee options contract is the right, but not the obligation, to buy or sell a specific amount of INR/US$ futures at a specified strike price, in a specified period of time. The buyer of a INR/US$ options contract pays a premium to the seller for the contract. The seller of the option, in return for being paid a premium, is obliged to provide the INR/US$ futures contract at the specified price if the buyer chooses to exercise the option contract.

There are two types of DGCX INR/US$ option contracts:

- A call option: this is an option contract that gives the buyer / holder of the option, the right, but not the obligation to buy the underlying INR futures on a specific date and at a specific price.
- A put option: this is an option contract that gives the option buyer / holder the right, but not the obligation to sell the underlying INR futures on a specific date and at a specific price.

As in any other financial transaction, there are two sides to every contract. For instance, whereas the buyer of a call option has the right to buy an INR futures, the seller or writer of the same option has the obligations to perform the other side of the transaction. That is,

The seller / writer / grantor of an option has the obligation:

- In case of a call option, to sell the underlying INR futures to the buyer of that option if the latter so desires (exercises his right).
- In case of a put option, to buy the underlying INR futures if the buyer of that option exercises his right.

The option seller is selling 'price protection' or an 'insurance' to the buyer who pays a certain amount of money called the premium to the option seller. In an option contract, the seller receives the premium for undertaking the obligation and the buyer pays the premium for acquiring the right under the relevant options contract. As such a buyer will exercise his right to buy or sell the underlying INR futures only if it is profitable to him or he derives some other benefit in doing so.

Vocabulary

Option Premium: Option premium is basically the price at which the option contract is traded i.e. the amount which is paid by the buyer of the option to the seller of the option, whether a call or a put.

Strike Price / Exercise Price

The price at which the buyer of the option agrees to buy (in the case of a call option) or agrees to sell (in the case of a put option) the underlying INR Futures is called the strike price or the exercise price.

Exercise Date

The day on which the option can be exercised by the option buyer is called the exercise date.

Assignment

Assignment takes place when the option is exercised by the options buyer. The options seller is said to be assigned the obligation to deliver the terms of the options contract. If a call option is assigned, the options seller will have to sell the obligated quantity of the underlying INR Futures at the strike price. If a put option is assigned, the options seller will have to buy the obligated quantity of the underlying INR Futures at the strike price.

Expiration Date

The date on which an options contract becomes invalid and the right to exercise it no longer exists.

European option

An option in which the buyer can exercise his right only on the exercise date is called a European option. Options traded on DGCX will be European style for INR.

Moniness Concept

Options are often referred to as in-the-money, at-the-money and out-of-the-money depending on the market price of the underlying and the strike price of the option. The money reference is not a statement about the profitability of the concerned option.

In-the-money options (ITM)

An in-the-money option (ITM) is an option that would lead to a positive cash flow to the holder (buyer) if it was exercised immediately. A call option is said to be in-the-money if the price of the underlying futures contract is above the strike price (i.e. Current price > Strike Price). If the current traded price of the underlying futures is much higher than the strike price, the call is said to be deep ITM. A put option is said to be in-the-money if the price of the underlying futures contract is below the strike price (i.e. Current price < Strike price).

At-the-money options

An at-the-money option (ATM) is an option that would lead to a zero cash flow to the holder if it was exercised immediately. A call option or a put option will be at-the-money if the price of the underlying futures contract is equal to the strike price (i.e. Current price = Strike Price).

Out-of-the-money options

An out-of-the-money option (OTM) is an option that would lead to a negative cash flow to the holder if it was exercised immediately. A call option is said to be out-of-the-money if the price of the underlying futures contract is below the strike price (i.e. Current price < Strike Price). A put option is said to be out-of-the-money if the price of the underlying futures contract is above the strike price i.e. (Current price > Strike price).

Intrinsic value

The amount by which an option is in-the-money is called the intrinsic value of the option. Intrinsic value is calculated by taking the difference between the strike price and the current price of the underlying. Intrinsic value for a call option is calculated as the current price of the underlying futures contract less the strike price.

Time value

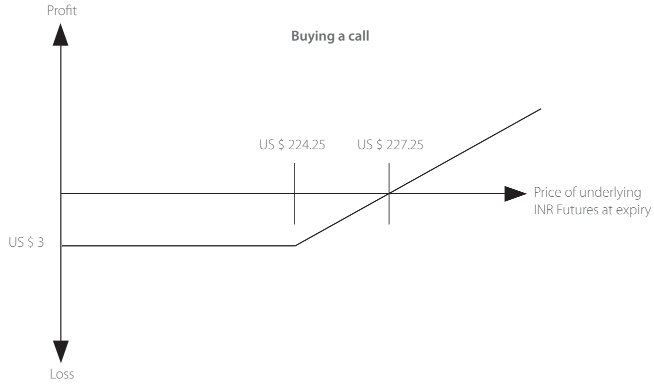
The amount by which an option's premium exceeds its intrinsic value is called the time value of the option. Time value is the amount an investor is willing to pay for an option above its intrinsic value in the hope that at some time before the expiration of the contract, the value of the underlying will generate positive cash flows. It is that part of the premium which the option buyer pays to the seller for the unexpired time period of the contract. Hence greater the time remaining for maturity, more will be the premium on account of time value. The time value decreases as the underlying futures contract approaches expiry. Both calls and puts have time value. As the total premium for an option is the sum of intrinsic value and time value, an OTM or ATM option (which do not have any intrinsic value) have only time value. Usually, the maximum time value exists when the option is ATM. At expiration, an option should have no time value.

DGCX INR Options Trading Examples

The following examples are based on European-style options on the delivery of INR/US$ futures, of 2,000,000 Rupee quoted in US $ per 10,000 Rupee

1– Buying a Call

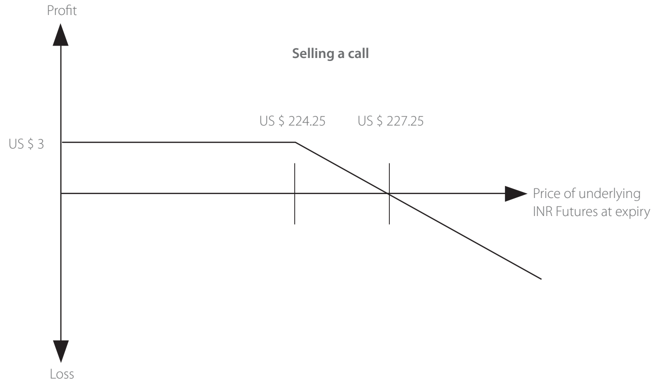
Assume the buyer of the option pays a premium of US $3, to the seller to buy a call option at strike price of US $ 224.25 per 10,000 Rupee. The buyer is the holder of the option. The holder now has the right, but not the obligation, to buy one lot of INR Futures for US $224.25 per10,000 Rupee. He can do this at the defined time on the expiry day of the contract month. The option premium is paid up-front and is non-returnable.



- At the time of expiry, if the DGCX INR futures price is above US $224.25, the holder has the right to buy an INR future contract for US $224.25, a lower price than in the market. He will, therefore, exercise the option paying US $224.25 for the long INR futures, then sell (short) INR futures at the existing higher price. Even if the INR Futures price is US $224.27 the option is worth exercising as the holder will make a profit of 0.02 per 10,000 Rupee, which can then be used to offset the up-front cost of the premium.
- If the DGCX INR futures market price at the time of expiry is below US $224.25, the option is worthless and the holder will abandon the option.

2 - Selling a Call

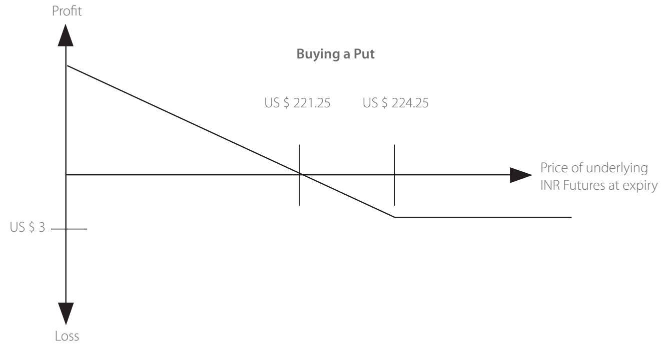
The seller of the INR option receives a premium of US $3 from the buyer, for a call option at a strike price of US $ 224.25 per 10,000 Rupee. Note that the full pricing received from the buyer will be 200 times higher as per the INR/US$ contract specification. The seller is now under obligation to sell the INR futures should the holder of the option decided to exercise on the expiry day of the contract month.



- If the price prevailing DGCX INR futures price at the time of expiry is above US $224.25, the holder will exercise the option against the seller. The seller is obliged to sell INR futures at a price of US $224.25. He may not already own it and have to acquire it in the market at a higher price and take the loss. As long as the loss is lower than the premium received, the seller will still make an overall profit.
- If the DGCX INR futures price at the time of expiry is below US $224.25, the holder will abandon the option and the seller will no longer have any obligation. The premium has been received and provides the seller's profit.

3 - Buying a Put

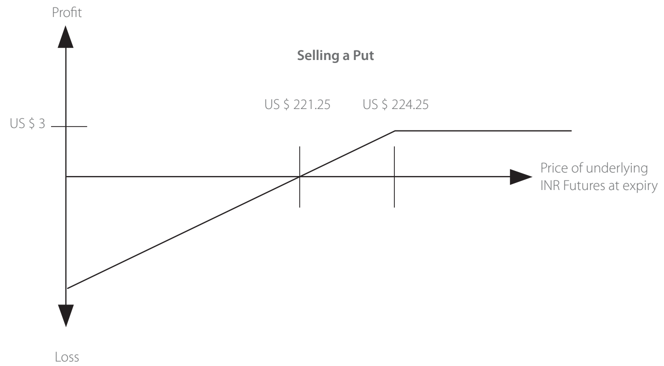
Assume the buyer of the INR option pays the premium US $3 to the seller, for a put option at a strike price of US $ 224.25 per 10,000 Rupee and becomes the holder of the put option (long put). The holder now has the right to sell one lot of INR Futures for US$ 224.25 per 10,000 Rupee. He can do this at the defined time on the expiry day of the contract month. The option premium is paid up-front and is non-returnable.



- At the time of expiry, if the DGCX INR Futures price is below US $224.25, the holder has the right to sell an INR futures contract for US $224.5, a higher price than the market. He will therefore exercise the option, recieving US $224.25 for the INR futures, then buying it back at the existing lower price.
- If the DGCX INR Futures price at the time of expiry is above US $224.25, the option is worthless and the holder will abandon the option.

4 - Selling a Put

The seller of the INR option receives the premium of US $3 from the buyer for a put option at a strike price of US $ 224.25 per 10,000 Rupee. The seller is now under an obligation to buy the INR Futures at US$ 224.25 per 10,000 Rupee if the holder decides to exercise.



- If the DGCX INR Futures price in the market is below US $224.25, the holder will exercise the INR option. The seller is obliged to purchase the currency futures for US $224.25 per 10,000 Rupee and sell it on in the market at the existing lower price and take the loss. As long as the loss is lower than the premium received, the writer will still make an overall profit.
- If the DGCX INR Futures price at the time of expiry is above US $224.25, the holder will abandon the option and the seller will no longer have any obligation

Options - Risk, Reward Summary and Profit and Loss Calculator

	Risk	Reward	Expiry Price < Strike	Expiry Price > Strike
Long Call	Limited to premium	Unlimited	Loss = Premium	Gain/loss = (expiry price -strike) - premium
Short Call	Unlimited	Limited to premium	Profit = Premium	Gain/loss = (expiry price - strike) + premium
Long Put	Limited to premium	Strike less premium (asset price would have to fall to zero)	Gain/loss = (strike-expiry price) - premium	Loss = Premium)
Short Put	Strike less premium (asset price would have to fall to zero)	Limited to premium	Gain/loss = (strike-expiry price) + premium	Profit = Premium

Futures vs. Options

	Futures	Options
Risk	Unlimited risk on long and short positions	Defined and limited for buyer of puts and calls; unlimited for sellers
Price Protection	Establishes fixed price	Establishes floor or ceiling price protection
Margin	Required on long (buy) or short (sell) positions	Futures style margins for sellers, no margins for buyers
Hedging	Long, short, spread	Multiple hedging strategies

How INR/US$ Options Quotes Appear on DGCX Terminal

Indian Rupee Options are curently traded on Indian Exchanges and the Non Deliverable Forward markets. The conventional quote in $ is for example 1$ = 48.90. This is the traditional Spot quote set by banks.

How the quotes appear on DGCX terminal

- The contract size of each INR futures contract is 2,000,000 – (2 million Rupees)
- The below Table demonstrates the Bid / Offer on the platform
- When the spot quote for $1 = Rs.48.90, the inverse quote for INR/USD will appear as 2.0450 i.e.(1/48.90)
- The tick value of each point is $2.

		Formula Basis	Bid	Offer
A	Indian Rupee per US $ in NSE		48.87	48.90
B	Inverse quote (1/ NSE price)	1/A	0.0204624	0.0204498
C	Price for 100 Indian Rupee in US Dollar	B*100	2.0462	2.0450
D	Price for 100 Indian Rupee in US Cents	C*100	204.62	204.50

		US Cents per 100 Rs.	INR Price	Contract Value (in US$)
		204.50	48.90	40,900.00
	Sold 1 DGCX INR 25AUG2011 contract on Aug 4th 2011 at	204.62	48.87	40,924.00
	Profit = (204.62 – 204.50) x 2,000,000 / 10,000			24.00

DGCX Options on INR/US$ Futures Contract Specification

Trading Symbol	DINRO
Contract Size	One DGCX Indian Rupee Futures Contract
Price Quotation	US Dollars in Cents per 100 Indian Rupees
Tick Size	US$ 0.000001 per INR or US$ 2 per tick
Maximum Daily Price Fluctuation	No Daily Limit
Style of Option	European
Delivery Months*	The nearest three (3) Contract Months
Last Trading Day	The Last Day of Trading for INR Options shall be the Last Day of Trading of the underlying INR Futures Contract
New Contract Listing	7 days prior to expiration of the front month Option Contract
Exercise of Options	On the Last Day of Trading, all in-the-money options are exercised automatically against the Final Cash Settlement Price of the underlying Indian Rupee Futures Contract, however, should a Member choose not to exercise an in-the-money option, the Member is required to notify the Exchange latest by 23:45 hours (15 minutes after trading ceases) All out-of-the-money options automatically expire worthless and will not be exercised
Strike Prices	For each DINRO series, there shall be a Strike Price chain with a strike interval of INR 0.25 converted into US cents equivalent in 2 decimal points At the outset, DINRO Strike Price chain will be available between INR 40.00 – 50.00 converted into US cents equivalent in 2 decimal points At all times there will be a minimum of 3 in-the-money, 1 at-the-money and 3 out-of-money strikes available Once the Daily Settlement Price approaches the lower end or higher end of the chain, additional strikes will be introduced for a minimum INR 5.00 with an interval of INR 0.25 converted into US cents equivalent in 2 decimal points
Position Limit	To be determined by the Exchange
Margin Requirement	Buyer pays full premium, while the Seller is margined on SPAN basis
Trading Hours	08:30 - 23:30 Hours Dubai time (GMT+4)
Trading Days	Monday through to Friday

* At the outset only 1 (one) Expiry Month will be listed. Additional listing of Expiry Months will be communicated by the Exchange in due course.

How to start trading futures and options contracts on DGCX

To trade DGCX futures and options contracts, buy and sell orders should be submitted via a member of the exchange, by telephone or possibly via an order routing (internet) service. Only exchange members can actually execute orders directly onto the exchange and so market participants should open a trading account with a member firm in order to start trading, or become a direct member of DGCX.

The list of DGCX member firms offering brokerage and clearing services can be found on our website at: www.dgcx.ae/memberslist.aspx. Alternatively, if you would like to become a member of DGCX, please contact us at membership@dgcx.ae.

Further Information

For further information on DGCX, our products and how to access our markets, please contact us on the details below. Alternatively, please refer to the contract specifications for product related information. Delayed prices for all DGCX contracts are available on our website.

Dubai Gold & Commodites Exchange

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As trading in derivatives involves leveraging, it can be fairly risky and could result into loss of capital in case the price of the commodity moves adversely to the position taken by an investor.