Foreign Exchange Policy Department Bangladesh Bank Head Office <u>Dhaka</u>

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FE Circular No. 04

11 Jaishtha, 1415 Date:-----25 May, 2008.

All Authorized Dealers in Foreign Exchange in Bangladesh

Dear Sirs,

Hedging the price risk of commodities

It has now been decided that authorized dealers can hedge the price risk of commodities (that are traded on exchanges or over-the-counter) of their customers through standard exchanged traded futures/options and OTC derivatives on commodities subject to prior approval of Bangladesh Bank.

The use of commodity derivatives will only be permitted when customers have genuine underlying commodity price risk exposure(s). This can be monitored by the Authorized Dealers (AD) through checking of the underlying risk exposure documents. Any kind of speculation through the use of commodity derivative instruments will not be permissible.

ADs must completely hedge the commodity price risk arising from the commodity hedge transactions by booking back to back transactions with banks having international standing or their branches operating in Bangladesh.

While applying to Bangladesh Bank for commodity hedge transactions the suitability and appropriateness form (Annex-2) must be submitted. To become eligible for offering commodity derivative products, ADs must have the ability to monitor the credit and market risk arising from such products. They should also forward relevant commodity price forecasts (page-3 of Annex-1 can be used as reference in this regard) to customers before the product is offered to them. The forecast(s), Annex-2 and Annex-3 should also be forwarded to Bangladesh Bank along with the application.

ADs should follow IAS 39 (Financial Instruments: Recognition and Measurement) for accounting of gain or loss on the commodity hedging instrument and the hedged item.

The following reporting requirements must be followed by the ADs:

- All the details of commodity hedge transactions that have been approved and booked with the clients should be reported to Bangladesh Bank on a monthly basis.
- At maturity of each transaction, ADs must send a detailed report to Bangladesh Bank.
- Audited financial Statements must have adequate disclosures of commodity hedge transactions.

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BRPD Circular No. 06, dated May 21, 2008 should be referred to for assigning risk weightage for all the commodity transactions for capital adequacy.

Prior to engaging in a transaction, ADs must advise client of all costs, charges and commissions related to the commodity hedge. ADs must explicitly mention all the downside risks and worst-case-scenarios of a commodity derivative hedge to the client prior to entering into a transaction.

A detailed annexure (Annex-1) has been attached with this circular as a reference for explaining basics of commodity derivatives, counterparties who are eligible to hedge through commodities.

Please bring the contents of this circular to the notice of all concerned.

Yours faithfully,

(Ahmed Ehteshamul Haider) Deputy General Manager Phone: 7120375

Commodity Defined:

In a general sense, the term "commodity" is used to refer to goods that are mined or agriculturally produced. However, in the financial world, "commodity" is more specifically used to describe the subset of commodities that is traded on exchanges or over-the-counter. It can be physically delivered and stored for a reasonable period of time. A few examples of the broad commodity sector are:

Energy: This includes crude oil, petrol, heating oil, natural gas and coal. of this market.

Precious Metals: The most important precious metals are gold, silver and the platinum group (platinum, palladium, rhodium, iridium, osmium and ruthenium).

Base Metals: The main base metals are aluminum, copper, zinc, tin, lead and nickel.

Agriculture: Also known as soft commodities, this is a heterogeneous group that includes wheat, rice, sugar, coffee, rubber, millet, soy, palm oil, cotton and so on.

Livestock: These include pork bellies, live cattle, feeder cattle, lean hogs and so on.

In addition, new categories like carbon emission credits and freight credits continue to emerge.

Popular Instruments:

FUTURES:

In a futures contract two parties agree to exchange a standard commodity at a predetermined price at a pre-specified date. Not all the futures contract have a physical delivery clause. Rather, most of the futures contracts are cash settled i.e. buyers and sellers exchange the difference between the contract price and current price of the commodity at the settlement date. Commodity futures contracts on numerous exchanges, including the Chicago Board of Trade (CBOT), Chicago Mercantile Exchange (CME), New York Mercantile Exchange (NYMEX), London Metals Exchange (LME), Intercontinental Exchange (ICE) and the Shanghai Metals Exchange. Brief description of the major commodity exchanges as follows:

NYMEX (COMEX), New York Mercantile Exchange

- Largest commodities exchange.
- Trades futures and option contracts for crude oil, natural gas, energy derivatives, precious metals and other base metals like copper and Aluminum.
- Trading is conducted through 2 divisions, the NYMEX division, home to energy, platinum and palladium markets; and the COMEX division, on which all other metals trade.

LME, London Metal Exchange

Trades base metals futures and options. Trade is conducted in lots rather than tones.

Intercontinental Exchange

Trades futures and option contracts for energy products, agricultural commodities and indices.

COMMODITY TYPE	EXCHANGES	COMMODITY TYPE	EXCHANGES
ENERGY		AGRICULTURE	
Crude Oil (WTI)	NYMEX, ICE	Com	CBOT, DCE, TGE, FFE
Crude Oil Brent	NYMEX, ICE	Wheat	ZCE, CBOT, KCBT, MGE
Natural Gas	NYMEX	Sugar	NYBOT, EURONEXT, TGE
Coal	NYMEX	Coffee	TGE, NYBOT,
Gasoline	NYMEX, TOCOM, CJCE	Orange Juice	NYBOT
Gas Oil	ICE	Soybeans	DCE, CBOT, TGE
Kerosene	TOCOM, CJCE	Soy Meal	DCE, CBOT
Fuel Oil	SFE	Cotton	ZCE, NYBOT
Ethanol	CBOT, CME, NYBOT	Pulp	NYBOT, CME
Electricity	NYMEX	Palm Oil	MDEX
PRECIOUS METALS		Сосоа	EURONEXT, NYBOT
Gold	TOCOM, COMEX	Rubber	SFE, TCE, OME
Silver	TOCOM, COMEX, CBOT	LIVESTOCK	
Platinum	TOCOM, NYMEX	Live Cattle	CME
Palladium	TOCOM, NYMEX	Lean Hogs	CME
Rhodium, Iridium, Ruthenium	Not Applicable	OTHERS	
BASE METALS		Carbon Dioxide Emissions	Powernext, EEX, Nordpool
Aluminium	LME, COMEX, TOCOM, OME, SFE	Plastic Resins (PP and LL)	LME
Copper	LME, SFE, COMEX	INDICES	
Lead	LME	Goldman Sachs Commodity Index (GSCI) Not Applicable	
Nickel	LME, OME	Dow Jones-AIG (DJ-AIG)	Not Applicable
Tin	LME	Rogers International Commodity Index (RICI)	Not Applicable
Zinc	LME	Reuters/Jefferies CRB	Not Applicable

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COMMODITY SWAP:

A swap where exchanged cash flows are dependent on the price of one or more commodities. Commodity swap is used to hedge against the price of a commodity. If used for a hedging purpose, the user of a commodity would secure a prefixed price and agree to pay a financial institution this fixed price. Then in return, the user would get payments based on the market price for the commodity involved.

On the other side, through a commodity swap producer wishes to fix his income and would agree to pay the market price to a financial institution, in return for receiving fixed payments for the commodity. It is to be noted that Swap levels are derived from futures level. The swap is, on a gross calculation, an average of the present values of a series of futures prices at evenly spaced time intervals (generally monthly). If a user wishes to pay \$7,906 to receive a ton of copper for each month, he is said to have bought a pay-fixed swap. An average swap would be an average of the discounted monthly average futures prices.

The following example would clarify the hedging through swaps:

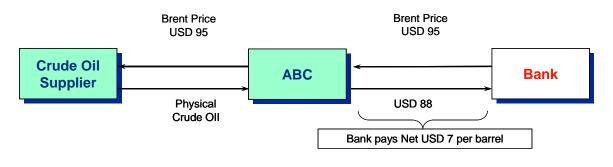
ABC Oil Company purchases 20,000 barrels of oil per month from international suppliers. Their pricing formula is as follows:

Purchase price = Month End price of Brent Oil

ABC is exposed to movement in Brent Oil price. If Brent oil price go up by 1 Dollar, they have to pay additional 20,000 US Dollar per month.

ABC can hedge the exposure by entering into a swap with an Authorized Dealer where ABC would pay fixed and receive floating on Brent Futures.

- On February 2008, ABC enters into a Crude oil Swap, where ABC pays an AD USD 88 and receives the closing price of Brent oil price for 20,000 barrel per month.
- Due to supply constraints, average Brent price at February end goes up to USD 95. ABC has to pay USD 95 per Barrel to supplier.
- The difference between the Brent price and Swap price is US Dollar 7. ABC would receive US Dollar 7 per barrel from the bank in February.



Net price paid by ABC:

Price paid to Oil Supplier	USD 95
Less: Net receipt from bank	<u>USD 7</u>
Net price paid per barrel	USD 88

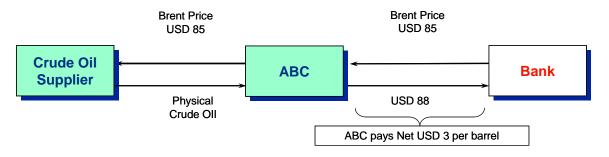
ABC saves a total of USD 140,000 in February 2008.

- The next month Brent closes at 85. ABC has to pay USD 85 per Barrel to supplier.
- The difference between the Brent price and Swap price is US Dollar -3. ABC would have to pay USD Dollar 3 to the bank in March.

•	Net price paid by ABC:	
	Price paid to Oil Supplier	USD 85
	Net payable to bank	<u>USD 3</u>
	Net price paid per barrel	USD 88

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Bottom line is irrespective of the Brent oil price movements ABC has fixed the Brent oil purchase price at US Dollar 88.



Variations of this structure are possible through:

- Leverage
- Knockout
- Cumulative benefit Knockout

COMMODITY OPTIONS:

Option is the right to buy or sell a product at a predetermine price within a specified period of time. Two basic elementary options are:

- 1. Call Option: Right to buy a commodity at a predetermined price within a specified date
- 2. Put Option: Right to sell a commodity at a predetermined price within a specified date.

By using a combination of swaps, calls, puts, extensions, digitals and barriers, a variety of strategy can be used for hedging.

Basic Hedging Strategies

- Swaps
- Zero-cost collars
- Zero-cost Seagull

Additional Features

- Knock-Out / Extendibility / Leverage
- Swaps in any currency (as the FX risk in relation to the USD can be easily hedged out by executing a series of FX forwards)

USING REUTERS TO FIND INFORMATION:

Base Metal	3-month LME Futures	Forwards	Volatility	Inventory
LME Aluminum	MAL3=LX	0#MAL-CLS	MAL/VOL01	LME/STX1
LME Copper	MCU3=LX	0#MCU-CLS	MCU/VOL01	LME/STX1
LME Zinc	MZN3=LX	0#MZN-CLS	MZN/VOL01	LME/STX1
LME Lead	MPB3=LX	0#MPB-CLS	MPB/VOL01	LME/STX1
LME Nickel	MNI3=LX	0#MNI-CLS	MNI/VOL01	LME/STX1
LME Tin	MSN3=LX	0#MSN-CLS	MSN/VOL01	LME/STX1

Precious Metals	Spot Price	Forwards	Comex Inventory
Gold	XAU=EBS	GOFO	COMEX/WHSTAT
Silver	XAG=EBS	SIFO	COMEX/WHSTAT
Platinum	XPT=EBS	-	COMEX/WHSTAT
Palladium	XPD=EBS	-	COMEX/WHSTAT

WTI Generic 1-month futures contract: CLc1 Brent Crude 1-month futures contract: LCOc1

		ANNEX - 2
		APPROPRIATENESS MEMO
Customer Name		:(Internal Credit Rating)
Transaction	Details:	
Date	:	
Products	:	Commodity Derivatives

What is the customer's annual import volume (amount and in USD terms) of the commodity that it wants to hedge? Please provide monthly import figures of the last one year.

Why is the customer doing these transactions? How do the transactions fit the customer' business?

What is the company' general view toward derivatives and how does the company use them?

Does the client have formal/informal derivatives policies? What are they?

Does the customer have the legal authority to enter into derivatives transactions? Is the company allowed to use derivatives under the terms of its constituent documents? Is there any limitation on specific types of derivatives, or caveats over capacity (e.g. "only if hedging")?

How has the client used derivatives in the past and in what new areas are they applying derivatives? Are recent derivatives transactions consistent with the past; if not, why?

How sophisticated is the company? Do they have their own pricing models? Do they build their own spreadsheets? Do they have access to market data (e.g. *Reuters, Telerate, and Bloomberg*)?

At what level are derivatives approved at the company? How active is senior management in decision making and/ or monitoring derivatives activity?

Is there evidence of "doubling up" or similar activity to erase earlier losses?

Is documentation complete? Are we comfortable as a credit matter with incomplete documentation?

Dealing Officer/Treasury Marketing Officer

Corporate Banking Officer/ Relationship Manager

Head of Corporate Banking/ Relationship Head

Customer' Suitability and Appropriateness [Periodic Review] (Preferably annual)

From: [Head of Corporate Banking/Relationship Head]

Date:

Re: Customers' Suitability and Appropriateness

I/we have determined the following with regard to the customer identified below:

- 1. Identity of Client []. This client has been designated as a [Market Participant (e.g banks)/Non-Professional Counterparty (customers)].
- 2. Summary of Client's past trading history with [authorized dealer] and (to the extent known) with other banks and financial institutions –
- 3. Summary of the type and tenor of transactions which we expect the Client to enter into with [authorized dealer] in future and why the Client would enter into such transactions –
- 4. Description of the Client' spersonnel with trading authority and their trading experience –
- 5. Description of the Client's risk management and control processes, including senior management involvement –
- 6. Any additional notes/remarks as are relevant or necessary -

Dealer

Corporate Banking Officer/ Relationship Manager