Industry Informational Report

Exchange for Physicals (EFP)

Background information on transaction structure,
industry practice and applications

prepared by

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Background

An Exchange for Physical (EFP) is a negotiated off-market transaction in which one party buys physical assets and sells futures contracts while the other party sells the physical market products and buys futures contracts that enable customers to swap physical exposure for an offsetting futures position. It offers the flexibility and certainty of an over-the-counter (OTC) market plus the counterparty guarantee of an exchange market.

An EFP is a transaction in which the buyer of a cash commodity transfers to the seller a corresponding amount of long futures contracts or receives from the seller a corresponding amount of short futures, at a price difference mutually agreed upon. In this way, the opposite hedges in futures of both parties are closed-out simultaneously.

EFP Benefits

- *Flexible order arrangement*. Exchange rules regarding pre-arrangement and disclosure stipulations do not apply to orders arranged under EFP rules.

- *Price certainty*. Trades can be transacted at any price agreed between counterparties. EFP trades may therefore legitimately occur at prices different to the prevailing price of a futures contract.

- *Execution certainty*. EFP trades will be approved by the exchange as long as they occur in prescribed contracts and do not violate the exchange's business rules for EFP's.

- *Credit exposure*. Counter party credit may be reduced when an existing swap position, rather than a physical position, is reversed and replaced with a futures position. In so doing, an EFP may allow counterparties to release "credit," clearing the way for further OTC trading.

- *Reduced balance sheet and margin requirements*. By netting OTC positions against opposing futures positions, margin and credit support requirements can be reduced.

- *24-Hour trading*. EFP transactions can be negotiated around the clock but must be posted to an exchange during business hours.

EFP Pricing Parameters

The pricing of particular EFP transactions may depend on a number of parameters including the following:

- The valuation of OTC credit exposures.
- Cash-flow funding (cost-of-carry) considerations; e.g., positive or negative variation margins and funding of initial margin requirements.
- The terms and conditions attached to the underlying OTC transaction, including the underlying physical price.
- The current futures price.

Given the number of variables involved, EFP transactions will typically be traded at a discount/premium to the original physical price.

Transaction Flow

The following outlines the step-by-step process that typically occurs from start to finish in an overall EFP transaction:

1. Party A (a seller of physical product) and Party B (a buyer of physical product) negotiate to establish a price level to do the overall EFP transaction. This usually takes the form of establishing a differential price between the two sides of the transaction, namely the physical and the futures (for example, a differential agreed might be 23 cents over the NYMEX futures price on the day of physical product delivery).

   The transaction may be conducted through a broker or directly between the principal parties. When this transaction is agreed upon and contracted, Party A will be obligated to deliver physical product and deliver a short futures position during some pre-agreed delivery month in the future. Party B will be obligated to do the opposite—namely, receive physical and receive a short futures position on the same timing. The only pricing provision in this EFP transaction which is fixed is the difference between the physical product and the futures contracts position.

Transaction Flow (cont'd)

2. At some time during the pre-agreed delivery month, the two parties will agree on the actual delivery date for the product.

   Prior to the physical product delivery date, the invoice sale price of the physical transaction will be set and agreed upon by the two parties. [This exact physical product sale price is subject to discussion and negotiation between the two parties, but is typically set at a level near the current spot price for the day of delivery.] This is required so that the physical product can be invoiced and payment received; however, the economic value of the overall EFP transaction has already been established based on the previously agreed EFP price differential, as described above.

3. The setting of the physical price also sets the price for the futures because of the pre-determined difference that was negotiated at the start of this EFP transaction.

4. Sometime before the end of the physical product delivery month [although not necessarily before the actual physical delivery day within that month], the EFP will be posted to the futures exchange, such as the NYMEX. The Exchange will then remove the short futures contracts from one party's account and deposit the short futures contracts in the other party's account.

5. At this point the overall EFP transaction is complete. Both legs of the EFP transaction have been performed on; the futures and the physicals have both been exchanged.

Exchange for Physicals Structure

Representative Exchange [of Futures] for Physicals (EFP) Transactions That Could Be Undertaken

SCENARIO 1 – EFP of inventory hedge in-place initially

Background

For illustration purposes, consider the following.

Presume that Company A as a U.S. Gulf Coast (USGC) diesel supplier has 10,000 bbls of diesel in local storage tanks. In order to avoid the risk of the price going down before Company A has sold the diesel, Company A has previously sold 10 April NYMEX heating oil [HO] futures contracts at $3.00/gallon, as an inventory hedge. The April futures price has fallen $0.10/gallon since then, to $2.90/gallon.

A refiner/distributor, Company B, wants to buy the USGC diesel from Company A but also anticipates that the price of diesel could fall further, so has left open their price exposure and does not have a futures contract in place.

Exchange for Physicals Structure (cont'd)

Mechanics of the Exchange (of Futures) for Physical

On January 15th as an example date, Company A agrees to sell the 10,000 bbls of diesel for March USGC delivery to the customer, Company B, at the NYMEX April HO futures contract settlement price as of that trading day, January 15th, plus 5 cents per gallon to reflect the basis differential for location (USGC rather than NY) and product (diesel rather than HO). Company A and Company B agree to EFP the trade and take equal and opposite futures positions to that which they have physically traded.

The two parties advise their respective futures brokers that they have agreed this EFP transaction. The two brokers then contact each other and register (post) with the NYMEX that this EFP has been agreed and the price. Company A's existing short 10 April futures position is closed. Simultaneously, Company B has a position opened of 10 short April futures. The day following the registering of the EFP, the margin funds on Company A's NYMEX futures contract will be released to Company A, and likewise, Company B will post the initial futures account margin at current NYMEX margining requirements. Company A's closed futures will also, in this example, result in a gain of $0.10/ gallon paid to Company A.

Exchange for Physicals Structure (cont'd)

Even though Company A's futures position [inventory hedge] is closed out, their diesel fuel inventory price risk has been offset or eliminated by a physical sales contract to Company B. Company B has become exposed to the price risk [which was presumed initially, as noted above, that they did not want] on the purchase of the inventory [long at
$2.95], but is simultaneously hedged by the short futures position that has been created in their NYMEX account by the EFP posting.

At a date in March mutually agreed by Company A and Company B, Company A will make physical delivery of the 10,000 bbls of diesel to Company B on the USGC and will invoice Company B at the agreed January 15th NYMEX April HO futures contract settlement price plus 5 cents per gallon (equal to $2.95/gallon). Company A will receive payment per agreed payment terms (typically either prepayment or 3 day terms). This concludes the overall EFP transaction for Company A, for both the futures and physicals.

For simplicity of example, this description has excluded the payment of commissions on the physicals transaction if it were a brokered deal, and commissions to the broker/futures commission merchant for the NYMEX futures contracts. Similarly, the mechanics of and accounting for the initial and daily variation margining of the futures contracts are not the focus of this example.

Exchange for Physicals Structure (cont'd)

SCENARIO 2 – EFP of un-hedged inventory to hedged buyer

Background

Presume the same fact set as Scenario 1, except Company A has not previously entered into the inventory hedge as they have a view that the market price will increase. Company B in this Scenario 2 is concerned that prices may rise (as also expected by Company A) and has previously bought 10 April NYMEX heating oil [HO] futures contracts at $3.00/gallon, as a hedge of their supply needs.

For consistency and simplicity, we will assume that as in Scenario 1 the April futures price has fallen $0.10/gallon since then, to $2.90/gallon, participant price forecasts aside.

Exchange for Physicals Structure (cont'd)

Mechanics of the Exchange (of Futures) for Physical

Mechanics are somewhat the same as above in Scenario 1, except Company A does not have an existing short futures position as an inventory hedge to be closed by the EFP transaction with Company B; instead Company B has an existing long futures position.

The EFP agreement on January 15th, for the physical sale to Company B, is the same.

When the EFP is registered with the NYMEX through the parties' respective brokers, Company B's existing long 10 April futures position is closed and simultaneously, Company A has a position opened of 10 long April futures contracts.

The day following the registering of the EFP, the margin funds on Company B's NYMEX futures contract will be released to Company B, and likewise, Company A will post the initial futures account margin at current NYMEX margining requirements. The closed futures for Company B will also, in this example, result in a loss of $0.10/gallon to Company B.

Exchange for Physicals Structure (cont'd)

For Company B, even though their futures position [supply hedge] is closed out, the diesel fuel supply price risk has been eliminated by a physical supply sales contract from Company A. Company A no longer has price exposure on the sold inventory, but is simultaneously exposed by the long futures position that has been created in their NYMEX account by the EFP posting, which they can subsequently liquidate or maintain depending on their price risk preference.

Physical delivery and payment at a date in March mutually agreed by Company A and Company B will be the same as in Scenario 1, and concludes the overall EFP.

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