# FRA and DV01 Neutral Strategies on DI1

Learn about the strategies

DI1 strategies are Structured Transactions that combine two DI Futures Contract maturities with calibrated quantities to neutralize the maturities Unit Price (FRA/ UP Neutral) or the maturities DV01 (Neutral/Slope).

The main goal of this product is to offer an efficient way to trade Yield Curve strategies without execution risk and in a transparent manner.

It should be noted that, as this is a Structured Transaction, the product does not represent a new contract and does not have open positions at EOD since all trades are broken into DI Futures maturities.

The DI Futures Contract has the average daily rate of Interbank Deposits (DI) as its underlying asset. The average daily rate is calculated and disclosed by B3 between the Trading Date (inclusive) and the expiration date (exclusive), and is used to hedge and manage the interest rate risk of assets/liabilities benchmarked to DI.

## Target audience

- Banks
- Hedge Funds
- Non-resident investors
- Brokerage houses
- Distributors

## What are the advantages?

**Execution risk eliminated**

**Fee structure in line with the strategy's exposure and a 70% discount for day trades between strategies and outrights**

**Greater transparency to the market**

**Potential to leverage a greater volume of trades**

## How it works

When trading a DI1 strategy, participants will automatically receive 2 maturities for the DI Futures Contract in a ratio that equals the leg UPs (for FRA strategies) or the leg DV01 (for Slope strategies). To define this ratio, at the end of the last trading session of each week a ratio is calculated for each strategy and this ratio will be valid and applied throughout the following week.

## Specifications

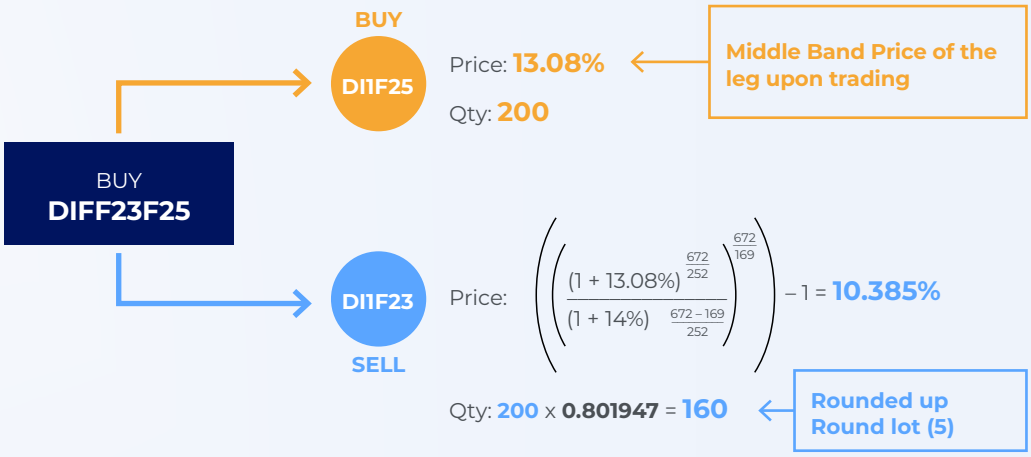
| | DI1 STRATEGIES | |
|---|---|---|
| **Characteristics** | **DV01 Neutral (slope)** | **Neutral UP (FRA)** |
| **Ticker** | DII + MAAMAA | DIF + MAAMAA |
| **Quotation** | Rate differential between maturities | Forward rate between maturities |
| **Tick Size** | 0.005% for Nearby Month EDSs with maturity up to 5 years and 0.01% for Nearby Month EDSs with maturity over 5 years | |
| **Round Lot** | 5 contracts | |
| **Ratio[1]** | $\text{Ratio} = \frac{DV01_{\text{Deferred Month}}}{DV01_{\text{Nearby Month}}}$ | $\text{Ratio} = \frac{UP_{\text{Deferred Month}}}{UP_{\text{Nearby Month}}}$ |
| **Leg Contract Qty** | $QTY_{\text{Deferred Month}} = QTY_{\text{Traded}}$<br>$QTY_{\text{Nearby Month}} = QTY_{\text{Deferred Month}} \times \text{Ratio}$ | |
| **Leg Prices** | $P_{\text{Deferred Month}} = P^{2}_{\text{Deferred Month}}$<br>$P_{\text{Nearby Month}} = P_{\text{Deferred Month}} - P_{\text{Traded}}$ | $P_{\text{Deferred Month}} = P^{2}_{\text{Deferred Month}}$<br>$P_{\text{Nearby Month}} =$ Composition FRA Rate and $P_{\text{Deferred Month}}$ |

1 It will be calculated every last trading session of the week and is valid throughout the following week.
2 Middle band price of the leg.

**Example 1:** FRA Strategy Purchase between DI1F23 and DI1F25

| Trading Date | MAY 3, 2022 |
|---|---|
| Ticker | DIFF23F25 |
| Traded Price | 14.00% |
| Traded Quantity | 200 Contracts |
| Ratio | **0.801947** |
| BDs to DI1F23 maturity | 169 |
| BDs to DI1F25 maturity | 672 |

**Leg UPs on April 29, 2022**
(calculation date of ratio to be applied on the trading week)
**DI1F25**: R$73,798.96
**DI1F23**: R$92,024.67
**Ratio**: F25 divided by F23 = 0.801947




**Example 2:** DV01 Neutral Strategy Sale between DI1F23 and DI1F25

| Trading Date | MAY 3, 2022 |
|---|---|
| Ticker | DIIF23F25 |
| Traded Price | 0.20% |
| Traded Quantity | 500 Contracts |
| Ratio | **3.148148** |

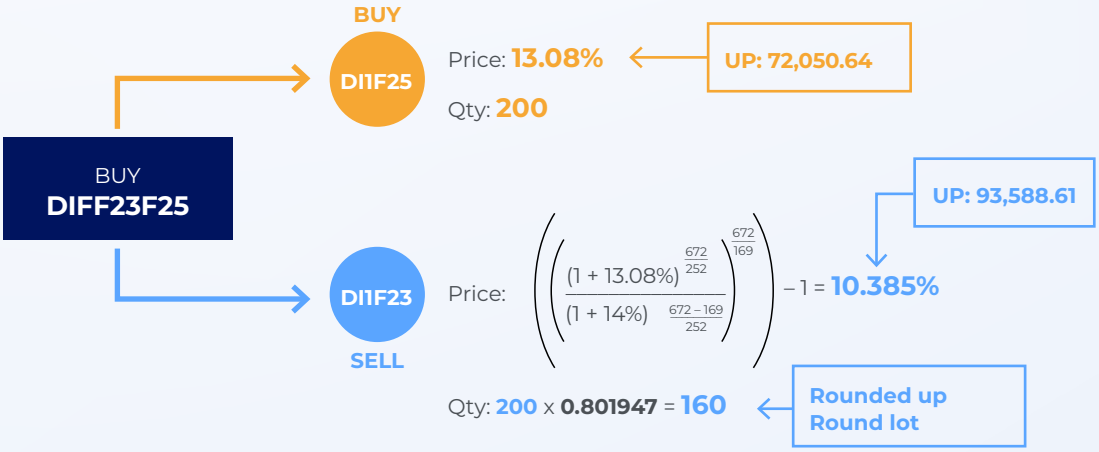
**Leg DV01 on April 29, 2022**
(calculation date of ratio to be applied on the trading week)
**DI1F25**: R$17.00
**DI1F23**: R$5.40
**Ratio**: F25 divided by F23 = 3.148148

## **Example 3:** FRA Strategy Arbitrage with Outrights

An investor carries out a **DI1F23** and **DI1F25** FRA strategy trade at the price of 14% (example 1). However, he notices that if he executes an outright sell for this strategy he will make a profit since by realizing the FRA price from the prices being traded in the legs, the FRA price will be 14.03%.

| **Trading Date** | **MAY 3, 2022** |
|---|---|
| Ticker | DIFF23F25 |
| Traded Price | 14.00% |
| Traded Quantity | 200 Contracts |
| Ratio | 0.801947 |
| BDs to DI1F23 maturity | 169 |
| BDs to DI1F25 maturity | 672 |

**Step 1**: Strategy Trading




**Step 2**: Trading the Strategy Outrights

| **Maturity** | **DI1F25** |
|---|---|
| **Transaction** | SELL |
| **Price** | 13.08% |
| **UP** | 72,050.64 |
| **Quantity** | 200 |

| **Maturity** | **DI1F23** |
|---|---|
| **Transaction** | BUY |
| **Price** | 10.30% |
| **UP** | 93,636.97 |
| **Quantity** | 160 |

**Resultado Final**

**DI1F25**

**UP Buy** (Strategy transaction):
R$72,050.64

**UP Sell** (Outright transaction):
R$72,050.64

**Result**:
R$0,00

**DI1F23**

**UP Sell** (Strategy transaction):
R$93,588.61

**UP Buy** (Outright transaction):
R$93,636.97

**Result**:
R$48.36 per Contract

To learn more about Structured Transactions, click on the link below or talk to your RM

I want to learn more