FRA and DV01 neutral strategies on FRC

Learn about the strategies

FRC strategies are Structured Transactions that combine two FRA on DI x US Dollar Spread (FRC) maturities with calibrated amounts to neutralize Unit Price (FRA/Neutral UP) maturities or DV01 (Neutral/Slope DV01) maturities.

The main goal of this product is to offer an efficient way to trade U.S. Dollar-denominated 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 split into DI x U.S. Dollar Spread Futures maturities.

The DI x U.S. Dollar Spread Futures Contract has as its underlying asset the interest rate calculated by the difference between one-day interbank deposits (DI) and the exchange rate variation measured by PTAX as calculated by the Central Bank of Brazil (BCB).

Target audience

- Treasuries
- 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 FRC strategy, participants will automatically receive 2 maturities for the FRA on DI x US Dollar Spread on a 1 to 1 ratio (for FRA strategies) or in a ratio that equals 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

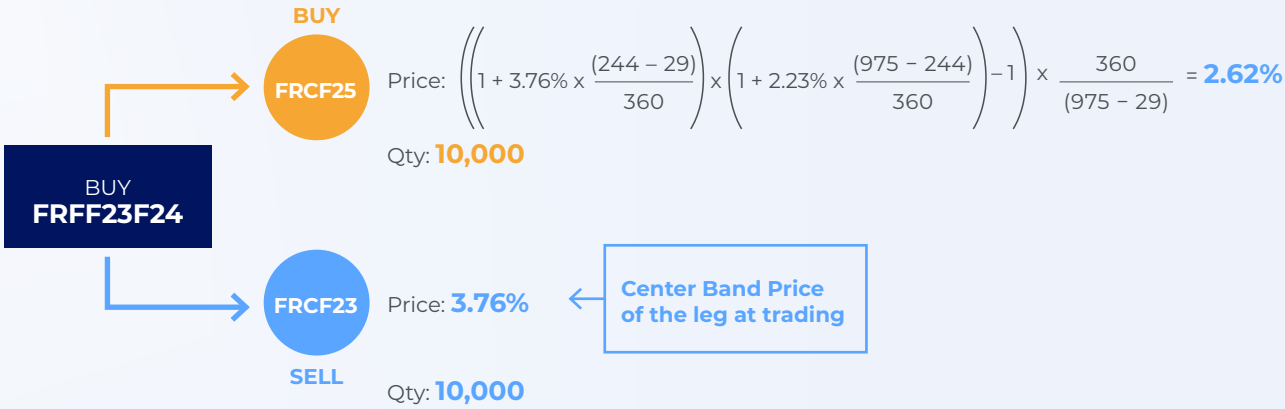
	FRC STRATEGIES	
Characteristics	**Neutral DV01 (Slope)**	**Neutral UP (FRA)**
Ticker	**FRI** + **MAAMAA**	**FRF** + **MAAMAA**
Quotation	Rate differential between maturities	Forward rate between maturities
Tick size	0.01%	
Round lot	10 contracts Minimum 30 contracts	10 contracts
Ratio[1]	$\text{Ratio} = \frac{DV01_{\text{Deferred Month}}}{DV01_{\text{Nearby Month}}}$	Ratio = 1 : 1
Leg Contract Quantity	$QTY_{\text{Deferred Month}} = QTY_{\text{Traded}}$ $QTY_{\text{Nearby Month}} = QTY_{\text{Deferred Month}} \times \text{Ratio}$	$QTY_{\text{Deferred Month}} = QTY_{\text{Traded}}$ $QTY_{\text{Nearby Month}} = QTY_{\text{Traded}}$
Leg Prices	$P_{\text{Nearby Mont}} = P^{2}_{\text{Nearby Mont}}$ $P_{\text{Deferred Month}} = P_{\text{Nearby Month}} + P_{\text{Traded}}$	$P_{\text{Nearby Month}} = P^{2}_{\text{Nearby Month}}$ $P_{\text{Deferred Month}} =$ Composition FRA Ratio and $P_{\text{Nearby Month}}$

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

Example 1: FRA Strategy Purchase between FRCF23 and FRCF25

Trading Date	MAY 3, 2022	
Ticker	FRFF23F25	
Traded price	**2.23%**	
Traded quantity	**10,000**	
Ratio	**1**	
Calendar days DDI base maturity	29	*June 1, 2022*
Calendar days F23 maturity	244	*Jan 2, 2023*
Calendar days F25 maturity	975	*Jan 2, 2025*

Ratio = 1:1 for FRA on FRC strategies



Example 2: DV01 Neutral Strategy Sale between FRCF23 and FRCF25

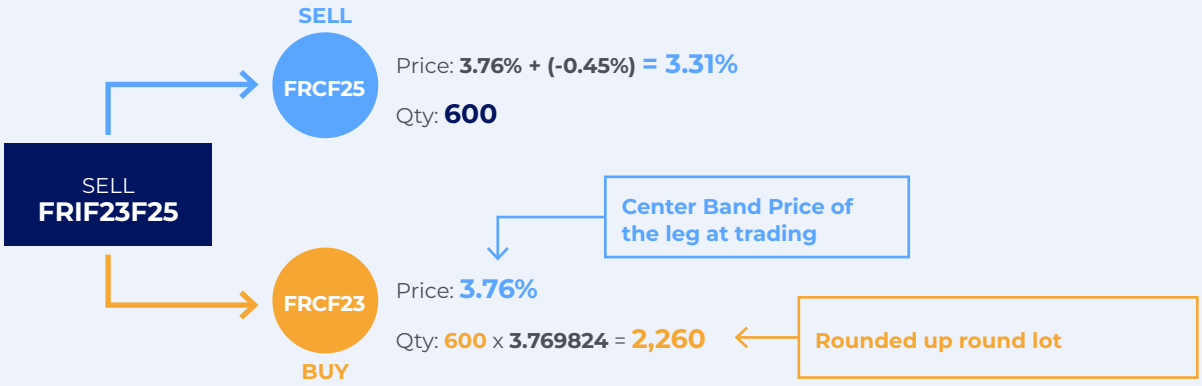
Trading date	MAY 3, 2022
Ticker	FRIF23F25
Traded price	**-0,45%**
Traded quantity	**600 Contracts**
Ratio	**3.769824**
Round lot	**30.000000**

Leg DV01 on April 29, 2022
(ratio calculation date to be applied on trading week)

FRCF23: R$2.90

FRCF25: R$10.92

Ratio: Dividing F25 by F23 = 3.769824

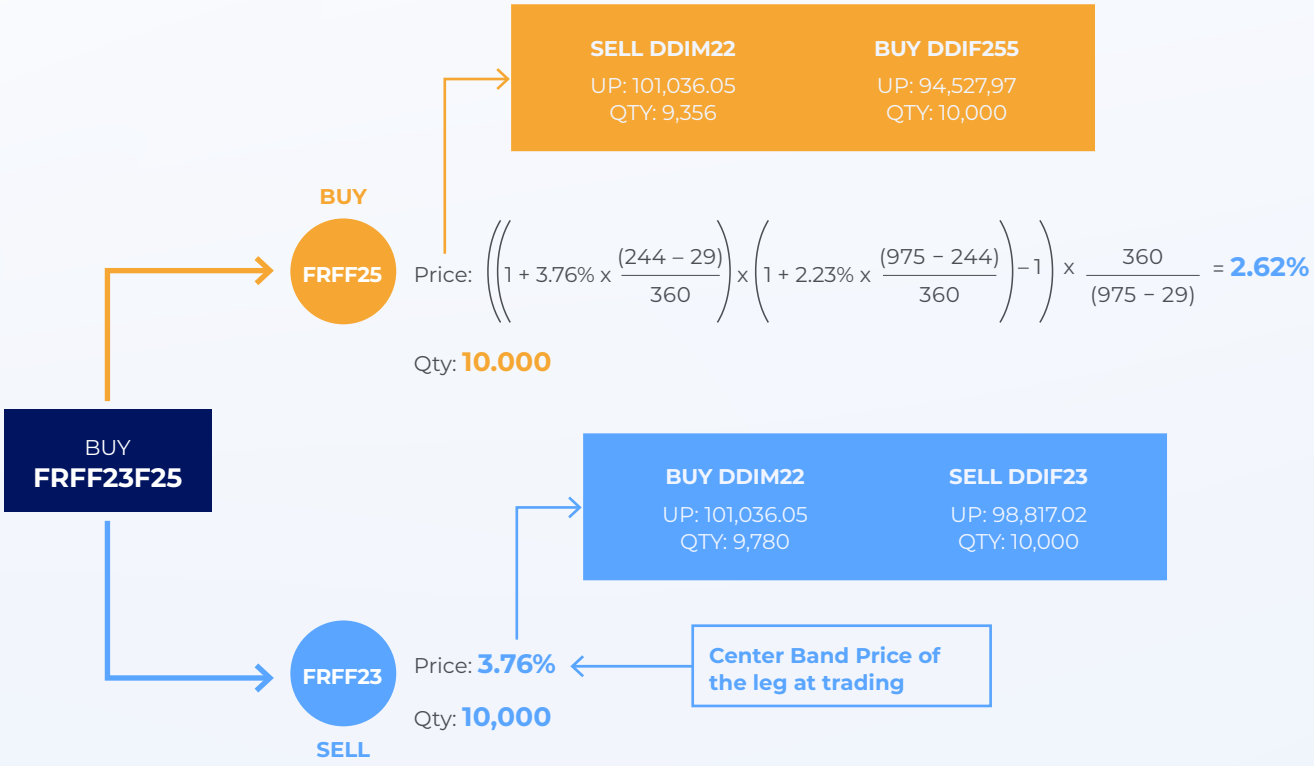


Example 3: FRA Strategy with Outrights

An investor carries out an FRCF23 and FRCF25 FRA strategy trade at the price of 2.23% (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 rate will be 2.3%.

Trading date	**MAY 3, 2022**
Ticker	FRFF23F25
Traded Price	**2.23%**
Traded Quantity	**10,000**
Ratio	1
Calendar days DDI (M22) base maturity	29
Calendar days F23 maturity	244
Calendar days F25 maturity	975

Step 1: Strategy Trading



Step 2: Trading the Strategy Outrights

Maturity	FRCF25
Transaction	SELL
Price	2.67%
UP DDIM22 – BUY	101,036.05
Quantity DDIM22 – BUY	9,344
UP DDIF25 – SELL	94,411.92
Quantity DDIF25 – SELL	10,000

Maturity	FRCF23
Transaction	BUY
Price	3.76%
UP DDIM22 – SELL	101,036.05
Quantity DDIM22 – SELL	9,780
UP DDIF23 – BUY	98,817.02
Quantity DDIF23 – BUY	10,000

Final Result

STRATEGY

SELL FRCF23 (Points x Contracts)
DDIM22 BUY: 988,132,569.00
DDIF23 SELL: 988,170,237.11

Result (Points x Contracts): 37.668,11

BUY FRCF25 (Points x Contracts)
DDIM22 SELL: 945,280,067.94
DDIF25 BUY: 945,279,739.34
Result (Points x Contracts): 328.61

OUTRIGHTS

BUY FRCF23 (Points x Contracts)
DDIM22 SELL: 988,132,569.00
DDIF23 BUY: 988,170,237.11

Result (Points x Contracts): -37,668.11

SELL FRCF25 (Points x Contracts)
DDIM22 BUY: 944,080,851.20
DDIF25 SELL: 944,119,173.99
Result (Points x Contracts): 38,322.79

Final Result (Points x Contracts): 37,668.11 – 37,668.11 + 328.61 + 38,222.79 = **38,651.40**
Result at R$**: 38,651.40 x 0.5 (Point Value in US$) x 5.0266 (T-1 PTAX) = **R$97,142.56

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

I want to learn more