







# Catching ECB rate moves with a net

Call butterfly portfolio showcase

11/8/2024

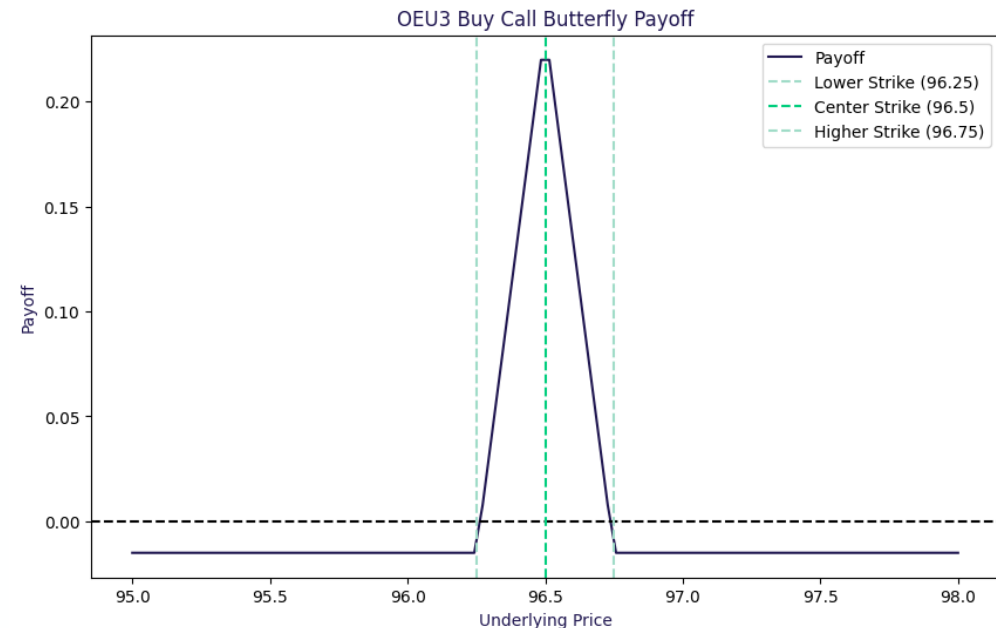


# Executive summary

OIS point to ECB rate cut	The <b>Overnight Indexed Swaps markets indicate no further rate hikes</b> by the ECB and point to a possible initial rate cut in April 2024, holding a <b>~50% probability</b> . In H1 2024, 3 ECB monetary policy meetings are anticipated, resulting in 27 possible scenarios in June, 9 in April and 3 in March, considering moves of 0, 25bps and 50bps.	
Advanced scenario analysis	To trade anticipated moves, we construct <b>directionally neutral Euribor call butterfly portfolios</b> to gain exposure in a cost efficient and risk averse manner. Call butterflies for all center strikes, <b>featuring the highest payoff and a 0.25-point gap to the outer strike</b> , have been further analyzed and combined into multiple trading portfolios.	
March ECB Monetary policy meetings	Strategically targeting a 25 to 50 bps rate down move with a call butterfly portfolio, as ~13 bps are already priced in, secures a maximum <b>ROI of 664%, risking €80k</b> trading on a 60% 25bps and 40% 50bps move portfolio.	
April ECB Monetary policy meetings	The directionally neutral characteristic of the call fly portfolio, enables us to <b>profit within a price range, offering a max. ROI of 412% trading the April contract</b> . This is complemented by a <b>wide break-even price</b> , created by combining multiple flies.	
June ECB Monetary policy meetings	Trading the Euribor June contract using a fly portfolio with 3 unique center strikes captures a ROI of up to 520%, risking €80k. By trading various center strikes, we can <b>adjust the skew of the overall payoff according to the trade idea</b> .	
Initial margin requiremntns	According to the Eurex Prisma methodology, an initial margin of around €129k, €92k and €251k is required to trade the March, April and June butterfly portfolios.	

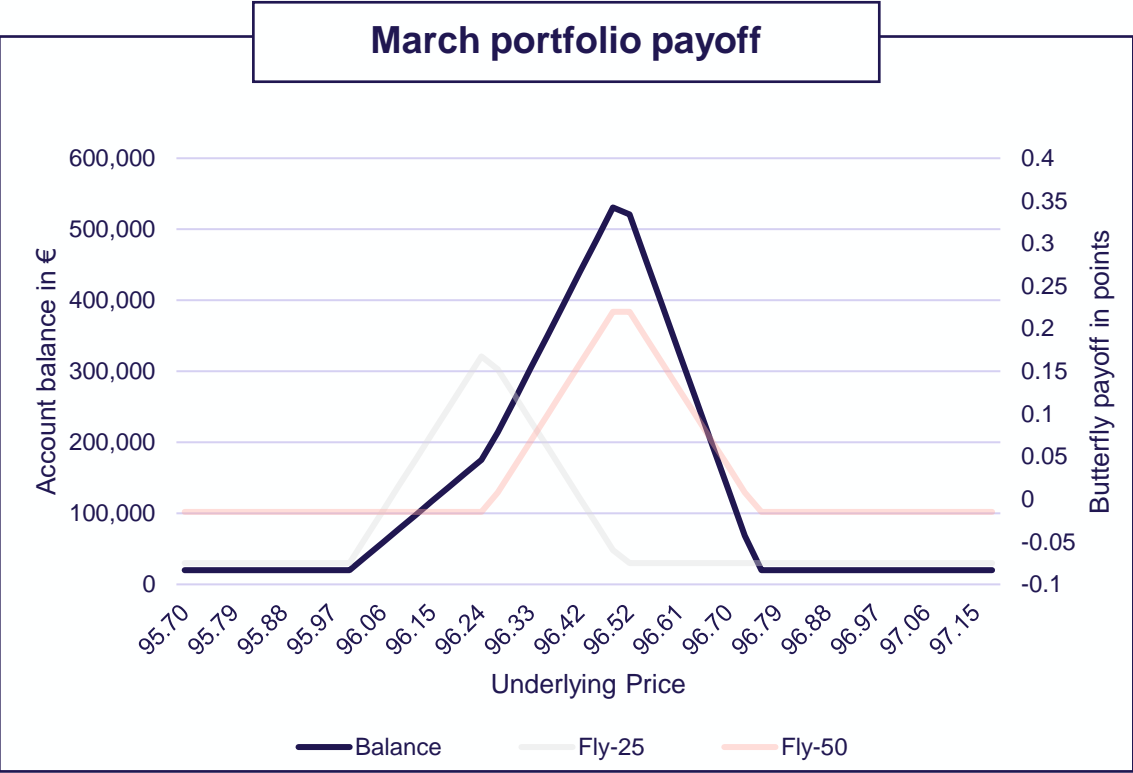
# Directionally neutral call butterfly portfolios in OEU3 offer a cost efficient and risk capped strategy to trade anticipated ECB rate down moves

Contract	CBQty	CBid	CAsk	CAQty
FEU3 Dec23	605	96.0200	96.0250	4
FEU3 Jan24	604	96.0300	96.0400	720
FEU3 Feb24	603	96.0950	96.1050	721
FEU3 Mar24	746	96.1550	96.1600	2
FEU3 Apr24	603	96.2300	96.2400	721
FEU3 May24	454	96.3100	96.3200	417
FEU3 Jun24	203	96.4150	96.4200	524
FEU3 Sep24	672	96.7000	96.7050	2
FEU3 Dec24	4	96.9500	96.9600	673
FEU3 Mar25	2	97.1400	97.1450	50
FEU3 Jun25	155	97.2550	97.2650	610
FEU3 Sep25	52	97.3200	97.3300	677
FEU3 Dec25	52	97.3400	97.3600	200



- The objective is to strategically trade anticipated ECB rate down moves of 0, 25bps and 50bps in Q1 & Q2 2024
- By conducting a scenario analysis of all possible rate decisions, it is possible to gauge probabilities of different outcomes based on the down moves already priced into the market, to create trading portfolios.
- Buy call butterflies were used to create a directionally neutral and risk capped position in the Euribor market.

# Strategically targeting a 25 to 50 bps rate down move by ECB with a call butterfly portfolio secures a maximum ROI of 664%, risking €80k

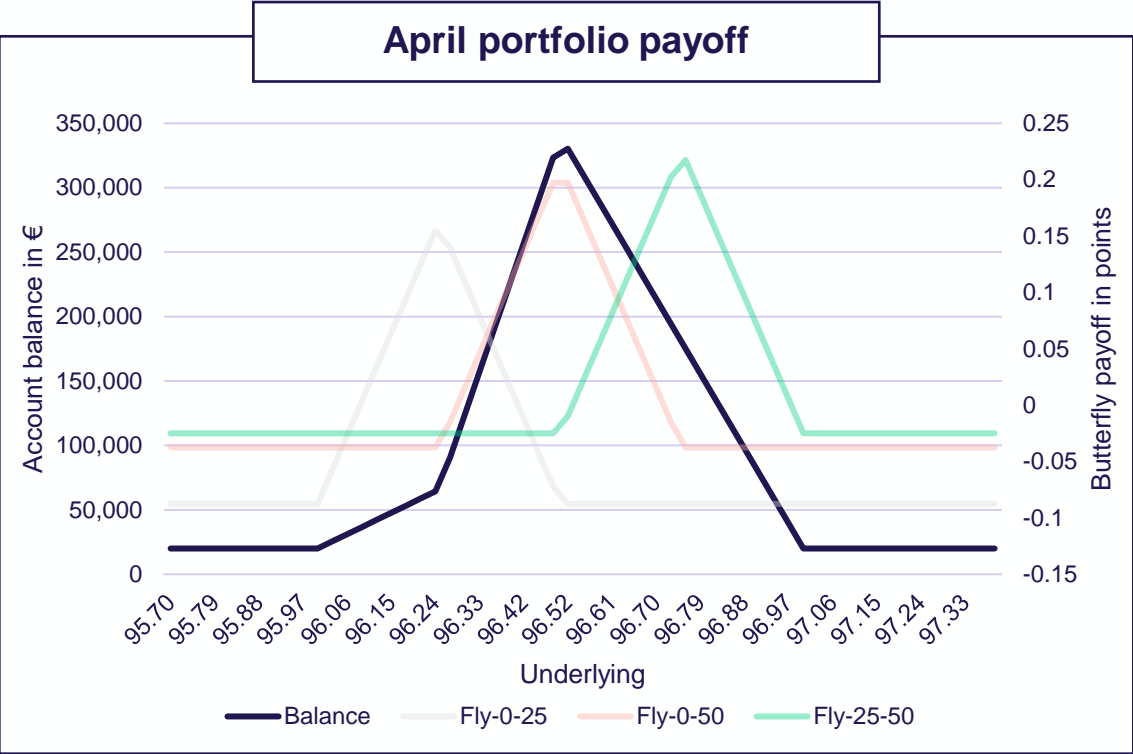


## Portfolio construction

- For the ECB monetary policy meeting in March, potential scenarios include a rate decrease by -25bps or -50bps
  - As of Nov23, ~13bps are already priced into the Mar24 contract
- To capitalize on the potential down move, we risk €80k of a 100k account to trade a portfolio consisting of:
  - 256x Fly-25bps
  - 853x Fly-50bps
- The maximum portfolio values is 531k at the price 96.48. The outer strikes cap the loss to -80k, creating a ROI of 664% The portfolios break-even price is between 96.13 and 96.71

Fly options	Lower strike	Center strike	Upper strike	Total cost	Max payoff	Size	Portfolio ratio
Fly-25	96	96.25	96.5	187.5€	425€	256	60%
Fly-50	96.25	96.5	96.75	37.5€	550€	853	40%

The directional neutral characteristic of the call fly portfolio, enables us to profit within a price range, offering a max. ROI of 412%, complemented by a wide break-even price range

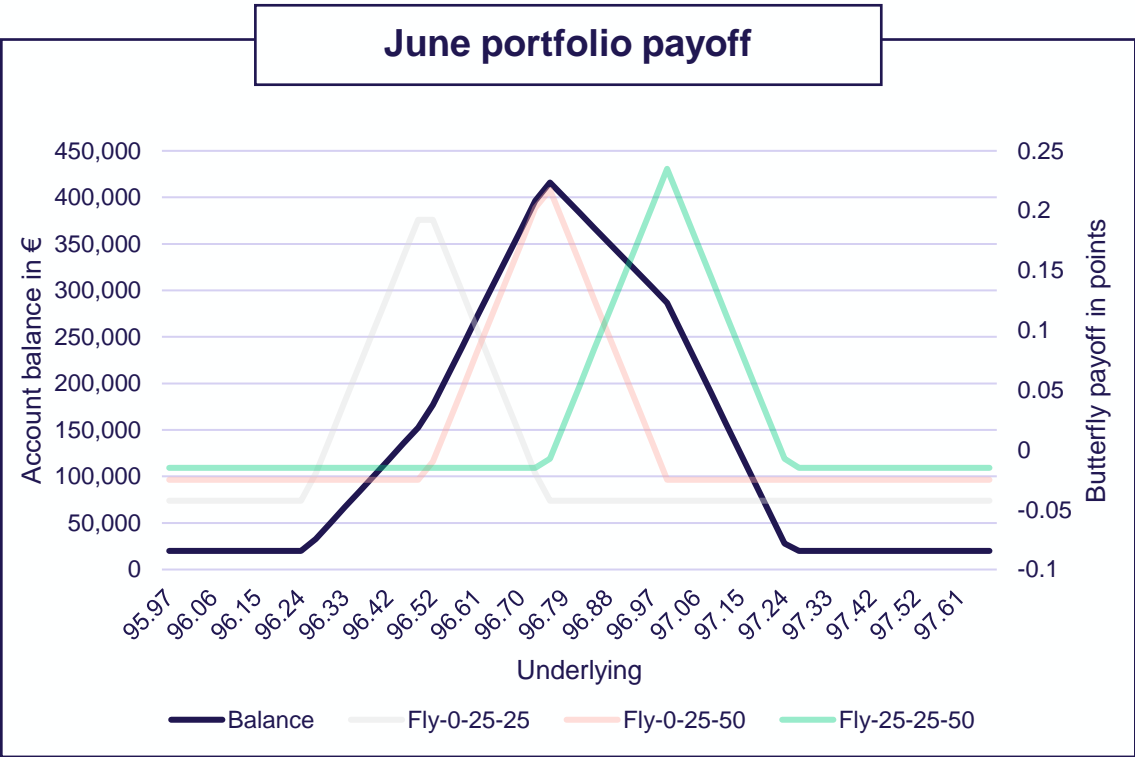


Portfolio construction

- To effectively trade the April monetary policy meeting, March’s potential rate decision needs to be factored in, resulting in 9 distinct rate decision scenarios.  
↳ As of Nov23, ~21bps are already priced into the Mar24 contract
- The directional neutral property of a call fly portfolio, enables us to profit within a range of our forecasted price outcome of various rate moves. The portfolio risks 80k on:  
↳ 74x Fly-0-25bps  
512x Fly-0-50bps  
256x Fly-25-50bps
- The maximum portfolio values is 330k at the price 96.52. The outer strikes cap the loss to -80k, creating a ROI of 412%  
The portfolios break-even price is between 96.285 and 96.88

Fly options	Lower strike	Center strike	Upper strike	Total cost	Max payoff	Size	Portfolio ratio
Fly-0-25	96	96.25	96.5	219€	387€	74	20%
Fly-0-50	96.25	96.5	96.75	94€	493€	512	60%
Fly-25-50	96.5	96.75	97	62€	544€	256	20%

# Trading the Euribor June contract using a fly portfolio with 3 unique center strikes captures a ROI of up to 520%, risking €80k on ECB rate decisions



## Portfolio construction

- To effectively trade the April monetary policy meeting, prior meetings' rate decisions need to be factored in, resulting in 27 distinct rate decision scenarios.  
↳ As of Nov23, ~41bps are already priced into the Jun24 contract
- By trading various center strikes, we can adjust the skew of the overall payoff according to the trade idea.  
To capitalize on the move, we trade a portfolio of:  
↳ 226x Fly-0-25-25bps  
640x Fly-0-25-50bps  
427x Fly-25-25-50bps
- The maximum portfolio values is 416k at the price 96.76.  
The outer strikes cap the loss to -80k, creating a ROI of 520%  
The portfolios break even price is at ~ 96.39 and 97.16

Fly options	Lower strike	Center strike	Upper strike	Total cost	Max payoff	Size	Portfolio ratio
Fly-0-25-25	96.25	96.5	96.75	106€	481€	226	30%
Fly-0-25-50	96.5	96.75	97	62€	543€	640	50%
Fly-25-25-50	96.75	97	97.25	37€	587€	427	20%

# ECB call butterfly portfolios - Initial margin requirements

March portfolio margin			
ETD and OTC Portfolio Margin 128,521.48 EUR			
Initial Margin	128,521.48 EUR	Premium Margin	0.00 EUR
PFI01	128,521.48 EUR	PFI01	0.00 EUR

Liquidation Group:		PFI01
Premium Margin:		0.00 EUR
Initial Margin:		128,521.48 EUR
Liquidation Group Split:		PFI01_HP2
Market Risk:		128,389.34 EUR
Liquidation Addon:		132.14 EUR
Long Option Credit:		0.00 EUR
Time to Expiry Adjustment:		0.00 EUR
Risk Measure Sets		
Simulation Type	RMS Market Risk	Weighting Factor
Historical	128,389.34 EUR	1
Stress	65,529.68 EUR	1

April portfolio margin			
ETD and OTC Portfolio Margin 92,095.40 EUR			
Initial Margin	92,095.40 EUR	Premium Margin	0.00 EUR
PFI01	92,095.40 EUR	PFI01	0.00 EUR

Liquidation Group:		PFI01
Premium Margin:		0.00 EUR
Initial Margin:		92,095.40 EUR
Liquidation Group Split:		PFI01_HP2
Market Risk:		92,051.83 EUR
Liquidation Addon:		43.56 EUR
Long Option Credit:		0.00 EUR
Time to Expiry Adjustment:		0.00 EUR
Risk Measure Sets		
Simulation Type	RMS Market Risk	Weighting Factor
Historical	92,051.83 EUR	1
Stress	49,540.62 EUR	1

June portfolio margin			
ETD and OTC Portfolio Margin 250,525.02 EUR			
Initial Margin	250,525.02 EUR	Premium Margin	0.00 EUR
PFI01	250,525.02 EUR	PFI01	0.00 EUR

Liquidation Group:		PFI01
Premium Margin:		0.00 EUR
Initial Margin:		250,525.02 EUR
Liquidation Group Split:		PFI01_HP2
Market Risk:		250,282.38 EUR
Liquidation Addon:		242.64 EUR
Long Option Credit:		0.00 EUR
Time to Expiry Adjustment:		0.00 EUR
Risk Measure Sets		
Simulation Type	RMS Market Risk	Weighting Factor
Historical	250,282.38 EUR	1
Stress	149,342.72 EUR	1



## Required portfolio margin

- According to the Eurex Prisma methodology, an initial margin of around €129k, €92k and €251k is required to trade the March, April and June butterfly portfolios.

# Thank you!

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