

Cross Product Margining at Eurex

Generating Margin Efficiencies for the
Buy Side and Sell Side across ETD and
OTC IRD

February 2026



1 Methodology

Prisma's risk model, liquidation groups & savings

Risk Account

Risk calculation is done on a Risk Account level, at which netting and diversification effects are applied. The clearing member's proprietary positions are separated from its clients' transactions by mapping multiple position-keeping accounts into specific Risk Accounts (PP & A1, A2...).

Liquidation Groups

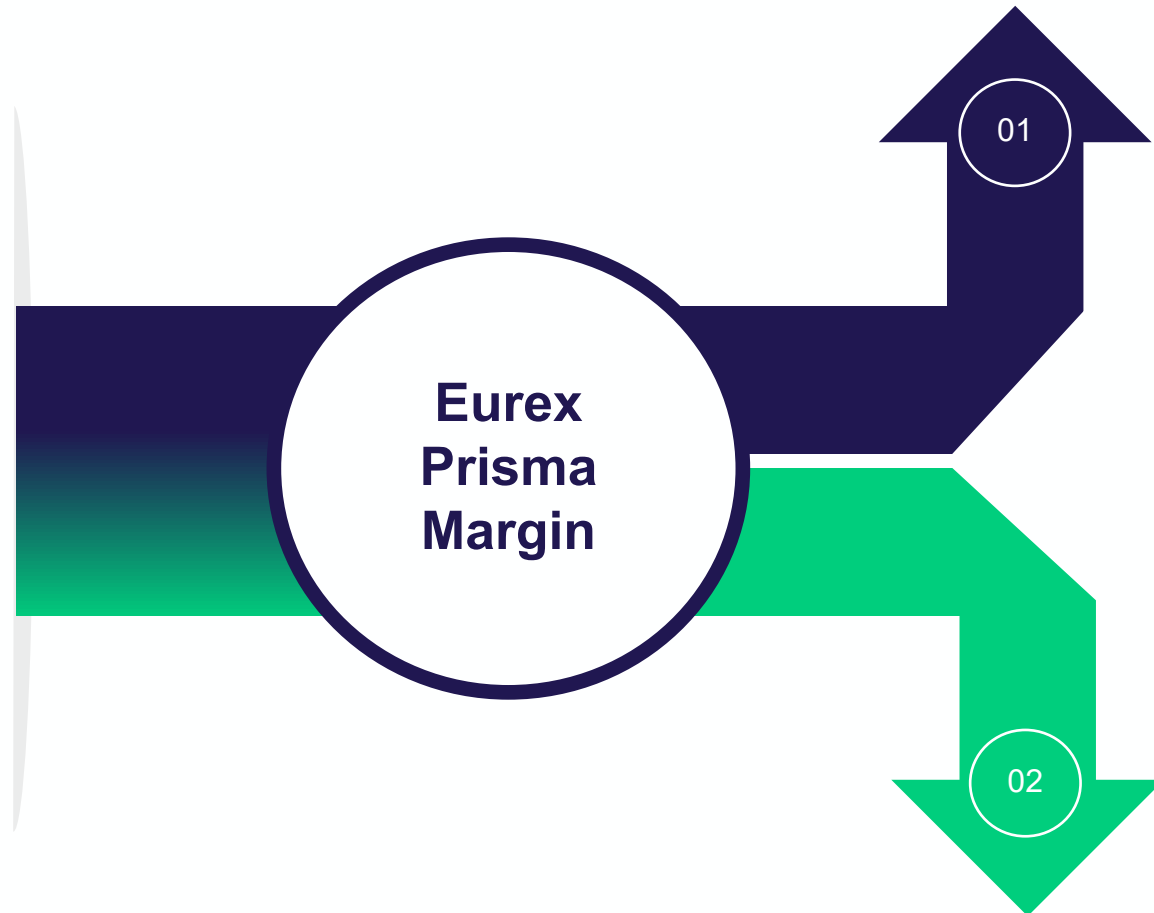
Products with comparable risk profiles, like Listed Fixed Income derivatives and OTC IRD, are organized into Liquidation Groups. These groups can be segmented into "Liquidation Group Splits" based on varying liquidation timeframes (MPOR). A 5-day MPOR applies to FI ETD when it is moved between splits to offset OTC IRD in cross-product margining.

Liquidation Group and Splits (excerpt)		MPOR (days)
PFI01	Listed Fixed Income and Money-Market Derivatives	2
	OTC Interest Rate Derivatives	5
PFX01	Foreign Exchange Derivatives	2
PEQ01	Listed Equity (Index) Derivatives	3

Prisma's risk model

Prisma's risk model calculates margin on a "Risk Portfolio" level. These risk portfolios are based on the combination of a "Liquidation Group Split" and a "Risk Account".

Eurex Prisma's two perspectives on margin



Backward-Looking Margin

Secures the current market value of all positions.

Variation Margin: Daily cash settlement of MtM gains and losses on futures-style products.

Premium Margin: Covers the current market value of premium-style options.

Forward-Looking Margin

Covers potential losses over the MPOR at a predefined confidence level, in the event of a default. It is the sum of the core Market Risk (MR) and several Model Adjustments (MA).

MR: Calculated using a simulation-based Value-at-Risk approach. It uses risk factor scenarios (filtered historical, stress period, event risk) to derive a PnL distribution.

MA: Enhance risk adequacy and include Liquidity Addon, Time to Expiry Adjustment, Long and Option credit.

Lower total margin within one liquidation group split

Isolated margining



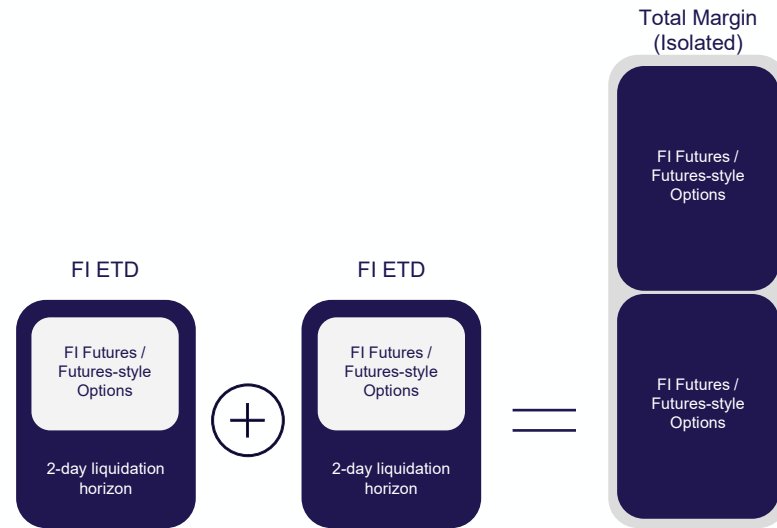
Each FI ETD position is margined independently, as if in a separate account.



Correlation benefits and natural risk offsets between positions are disregarded.



Total margin is calculated by simply summing up the gross margin of each individual position.



Cross-product margining



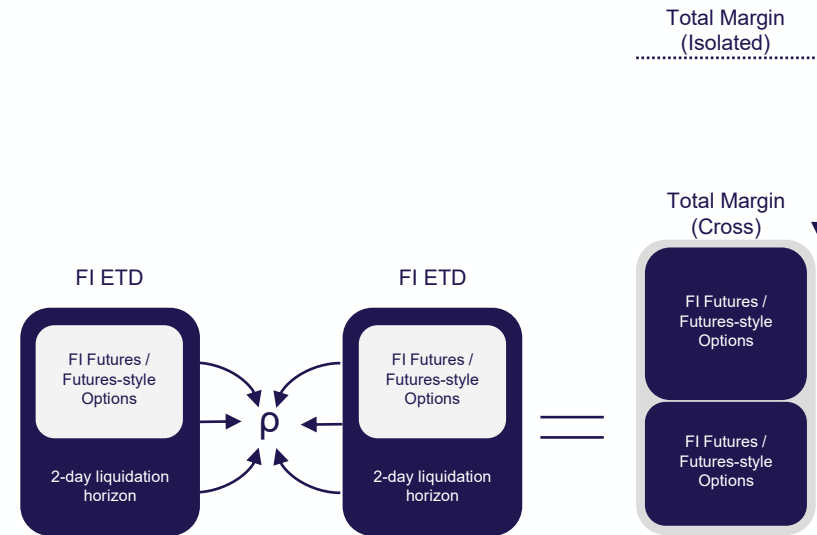
As similar products, they belong to the same liquidation group split.



Correlations (ρ) between different FI ETD positions are recognized, allowing for risk offsets.






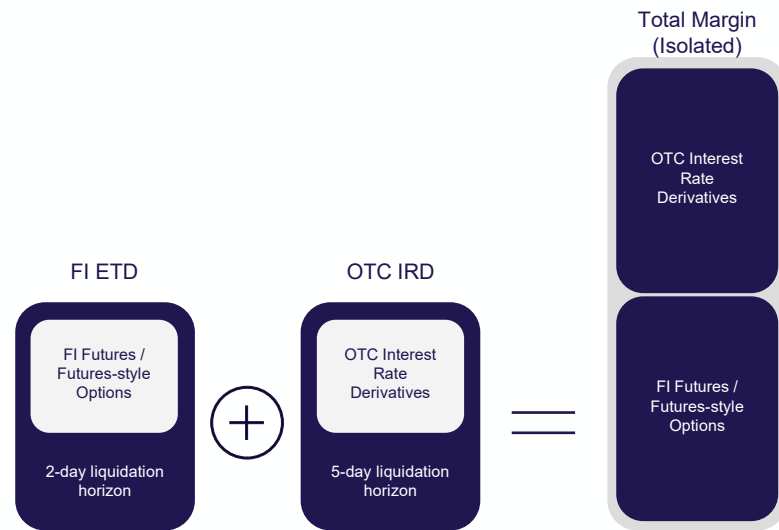
This reduces the overall net portfolio risk, leading to a significantly lower total initial margin compared to the isolated approach.





Lower total margin through OTC IRD - ETD Fixed Income offsets

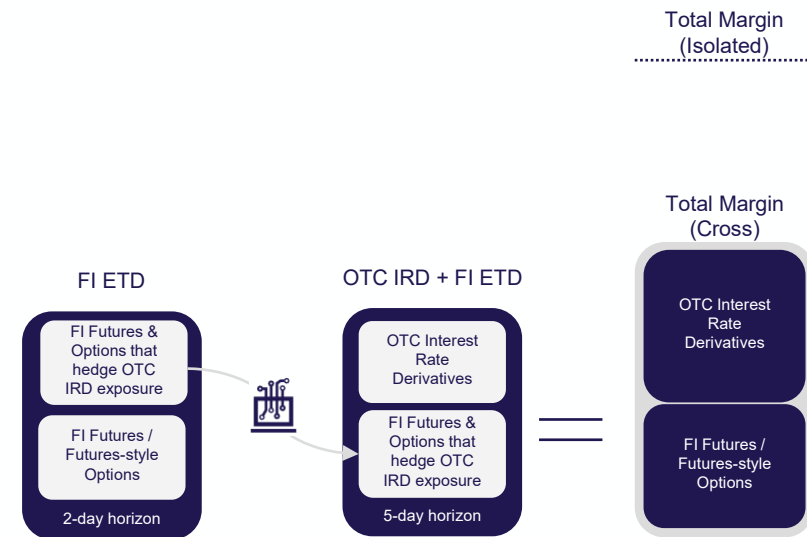
Isolated margining

-  OTC Interest Rate Derivatives (OTC IRD) and Fixed Income (FI) futures / futures-style options are margined separately.
-  No recognition of offsetting risk between OTC IRD and FI ETD.
-  Each product uses its own liquidation horizon.



Cross-product margining

-  Prisma identifies offsetting risk between OTC IRD and FI ETD.
-  Hedging ETD FI positions are transferred to the OTC IRD split, reducing net risk and total initial margin.



2 Examples & Analysis of Cross Product Margining

Trading correlated IR futures reduces margin requirements by up to 89%

FI Futures – Margin Savings Matrix

BBG		RXA	OEA	DUA	UBA	BFEA	IKA	BTSA	OATA	JDBA	FPA
	Eurex	BUND	BOBL	SCHATZ	BUXL	Euro Bonds	BTP	BTPS	OAT	3m ESTR	3m EURIBOR
RXA	BUND	-	86%	69%	81%	81%	48%	18%	78%	73%	79%
OEA	BOBL	89%	-	82%	71%	75%	50%	22%	75%	78%	81%
DUA	SCHATZ	74%	84%	-	59%	70%	46%	24%	64%	81%	84%
UBA	BUXL	81%	68%	56%	-	72%	49%	21%	73%	63%	71%
BFEA	Euro Bonds	82%	78%	64%	76%	-	47%	20%	71%	72%	80%
IKA	BTP	53%	53%	49%	44%	42%	-	64%	60%	47%	52%
BTSA	BTPS	44%	44%	45%	38%	36%	81%	-	48%	46%	46%
OATA	OAT	75%	75%	61%	70%	64%	62%	39%	-	60%	69%
JDBA	3m ESTR	79%	79%	82%	70%	75%	49%	25%	71%	-	88%
FPA	3m EURIBOR	82%	83%	82%	74%	79%	43%	22%	70%	82%	-

- 88% savings on Interest Rate Spreads (ESTR/Euribor)
- 86% savings on the German Curve (Bund/Bobl)
- 78% savings on Core Eurozone Spreads (Bund/OAT)
- 54% average savings on Bond Futures Spreads



Portfolio margining achieves these savings by netting correlated interest rate futures, drastically reducing overall margin.



This creates significant capital efficiencies for relative value strategies and treasury management.

Analysis based on long/short portfolios with a DV01 of €100,000 per leg. Snapshot: October 2025

PRISMA portfolio margining reduces margin requirements in the equity universe by up to -99%

- 99% savings on German index spreads (FDXM/FDAX)
- 93% savings on European tech spreads (FESX/TESX)
- 88% savings on European blue-chip spreads (FESX/FDAX)



Trading the relative strength between different geographic or sector-based equity indices isolates the “alpha” while hedging broad market “beta”. Core strategies are geographic spreads, sector rotation, macro thematic pairs and statistical arbitrage.



Instead of betting on the market's direction, bet on one index outperforming another.

- ↳ Long German equities (e.g. FDAX)
- ↳ Short Pan-European equities (e.g. FESX)

EQI Futures – Margin Savings Matrix

BBG	VGA	VHOA	SXOA	CAA	GXA	DFWA	ZWPA	ZRPA	ZTSA	ZTWA	
Eurex	FESX	TESX	FXXP	FESB	FDAX	FDXM	FMWO	FMEU	FMEM	FMEA	
VGA	FESX	-	-93%	-88%	-66%	-86%	-86%	-73%	-88%	-71%	-62%
VHOA	TESX	-93%	-	-90%	-63%	-87%	-87%	-76%	-90%	-73%	-61%
SXOA	FXXP	-88%	-89%	-	-59%	-84%	-85%	-79%	-98%	-70%	-64%
CAA	FESB	-64%	-62%	-61%	-	-61%	-62%	-56%	-61%	-55%	-53%
GXA	FDAX	-88%	-88%	-87%	-61%	-	-99%	-76%	-86%	-71%	-64%
DFWA	FDXM	-88%	-88%	-85%	-62%	-99%	-	-76%	-86%	-70%	-65%
ZWPA	FMWO	-80%	-80%	-79%	-59%	-78%	-78%	-	-79%	-74%	-68%
ZRPA	FMEU	-88%	-89%	-98%	-59%	-84%	-85%	-79%	-	-70%	-63%
ZTSA	FMEM	-75%	-74%	-73%	-67%	-74%	-75%	-76%	-73%	-	-85%
ZTWA	FMEA	-70%	-69%	-67%	-60%	-71%	-71%	-70%	-69%	-89%	-

*Analysis based on long/short portfolios with equal notional exposure per leg (€5m). Snapshot: October 2025

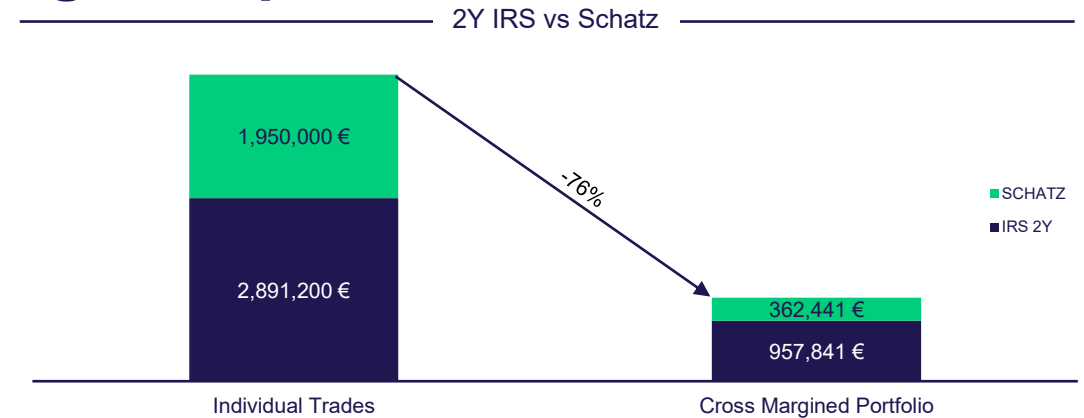
DV01-hedged portfolios combining OTC interest rate swaps and fixed income futures benefit from margin savings of up to 80%

IRS (fixed payer) vs long bond futures	Margin efficiency
1Y vs SCHATZ	-55%
2Y vs SCHATZ	-76%
3Y vs BOBL	-67%
5Y vs BOBL	-75%
7Y vs BUND	-73%
10Y vs BUND	-72%
15Y vs BUXL	-62%
20Y vs BUXL	-69%
30Y vs BUXL	-65%


IRS vs EURIBOR	Margin efficiency	IRS vs ESTR	Margin efficiency
1Y	-76%	1Y	-59%
2Y	-80%	2Y	-70%
3Y	-80%	3Y	-73%
5Y	-80%	5Y	-58%


	IRS 2y (pay)	FEU3 Dec-25	FEU3 Mar-26	FEU3 Jun-26	FEU3 Sep-26	FEU3 Dec-26	FEU3 Mar-27	FEU3 Jun-27	FEU3 Sep-27
Notional/Contracts	500m	500	500	500	500	500	500	500	500

Analysis based on long/short portfolios with a DV01 of €100,000 per leg.
Snapshot: October 2025



Key Findings


 DV01-hedged portfolios combining interest rate swaps and fixed income ETDs benefit from margin savings of up to 76%, with an average of 68% along the curve.


 By hedging interest rate swaps against money market strips, margin savings can reach as high as 80%, when trading a 2-year swap versus FEU3 strips.

OTC IRS Margin Components

IRS Margin Components in Terms of Trade Notional

- IM increases with an increase in tenor.
- IM depends on the traded notional, evidently in the 20 yr, 30 yr and 50 yr tenors.

Currency	Notional (in million)	Margin Component	Receive Fix						Pay Fix					
			Maturity in Years						Maturity in Years					
			2	5	10	20	30	50	2	5	10	20	30	50
EUR	10	Market Risk	0.66%	1.80%	3.42%	5.46%	6.64%	8.30%	0.71%	1.65%	3.08%	5.46%	8.53%	15.40%
		Liquidity Adjustment	0.01%	0.03%	0.05%	0.10%	0.14%	0.29%	0.01%	0.03%	0.05%	0.10%	0.14%	0.29%
		Total IM	0.67%	1.83%	3.47%	5.56%	6.78%	8.59%	0.72%	1.68%	3.13%	0.56%	8.67%	15.69%
	100	Market Risk	0.66%	1.80%	3.42%	5.46%	6.64%	8.30%	0.71%	1.65%	3.08%	5.46%	8.53%	15.40%
		Liquidity Adjustment	0.01%	0.03%	0.05%	0.11%	0.17%	0.33%	0.01%	0.03%	0.05%	0.11%	0.17%	0.33%
		Total IM	0.67%	1.83%	3.47%	5.57%	6.81%	8.63%	0.72%	1.68%	3.13%	5.57%	8.70%	15.73%
	1,000	Market Risk	0.66%	1.80%	3.42%	5.46%	6.60%	8.30%	0.71%	1.65%	3.08%	5.46%	8.53%	15.40%
		Liquidity Adjustment	0.01%	0.04%	0.08%	0.24%	0.40%	0.78%	0.01%	0.04%	0.08%	0.24%	0.40%	0.78%
		Total IM	0.67%	1.84%	3.50%	5.70%	7.00%	9.08%	0.72%	1.69%	3.16%	5.70%	8.93%	16.18%

Calculation date used : 28th October 2025

Thank you !

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Client Solutions & Cross Product Innovation

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