

Eurex Fixed Income

Italian Yield Curve & Product Development Roadmap

25th November 2020



1 Volume Development Q3 2020

European FI Futures & Options Volume and OI development

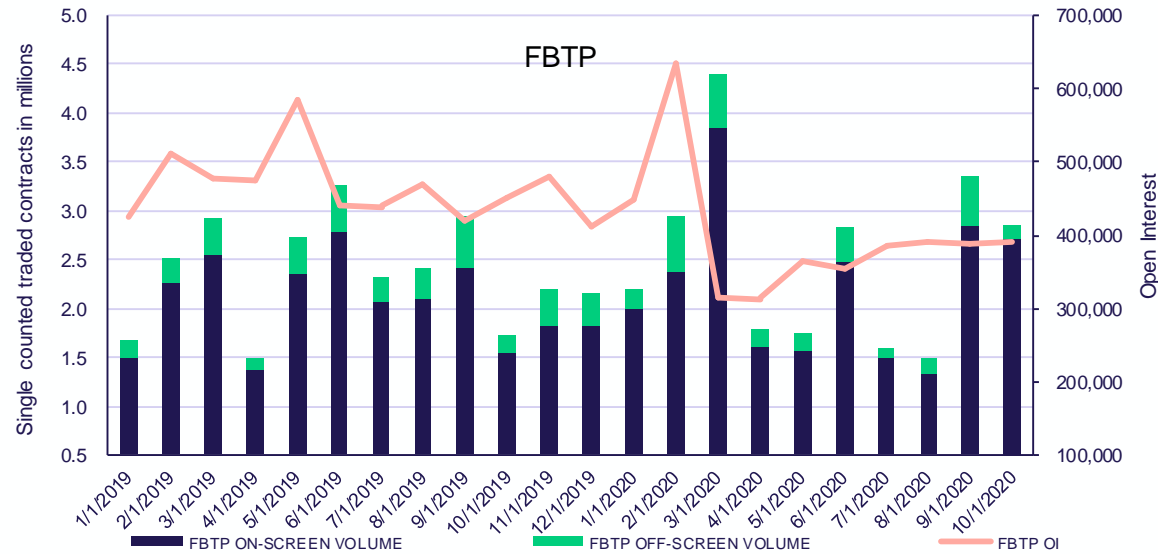
FI Futures and Options						
Contract	Product ID	Q3 2019 Traded Contracts	ADV Q3 2019	ADV Q3 2020	ADV 2019 vs 2020	Open Interest adjusted (contracts) Q3 2020
Bund	FGBL	143,473,753	747,259	694,481	-7%	1,115,866
Bobl	FGBM	95,697,458	498,424	432,399	-13%	892,352
Schatz	FGBS	70,988,815	369,733	367,630	-1%	1,397,529
Buxl	FGBX	11,788,955	61,401	64,209	5%	211,136
OAT	FOAT	30,275,403	157,684	171,706	9%	499,586
BTP	FBTP	22,357,689	111,675	116,301	4%	403,943
Short Term BTP	FBTS	13,735,958	67,392	69,046	2%	194,497
BONO	FBON	130,966	682	609	-11%	4,042
Bund Options	OGBL	36,261,115	188,860	110,317	-42%	505,678
Bobl Options	OGBM	4,595,943	23,937	11,308	-53%	95,712
Schatz Options	OGBS	8,665,467	45,133	45,965	2%	505,999
BTP Options	OBTP	939,826	4,895	5,580	14%	69,146
OAT Options	OOAT	193,931	1,010	500	-50%	1,720

Key facts 2020

- Traded volume in listed FI derivatives until end of Q3 2020: **403,914,325** contracts
- Fixed Income futures volumes were **elevated in Q1**, but saw a severe correction in Q2. We saw suppressed volumes in Q3 stemming from the **lack of volatility** and a **compression of the sovereign yield spreads**

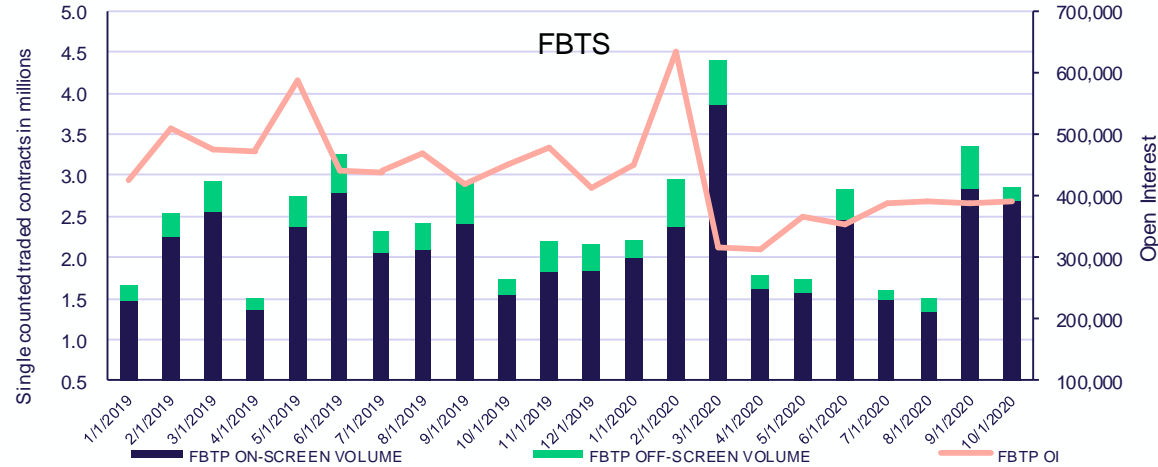
2 Development of the Italian Futures and Options Market in 2020

The Italian futures market segment over the recent years established itself as a liquid and reliable trading and hedging tool for Europe



FBTP and FBTS Volume and OI

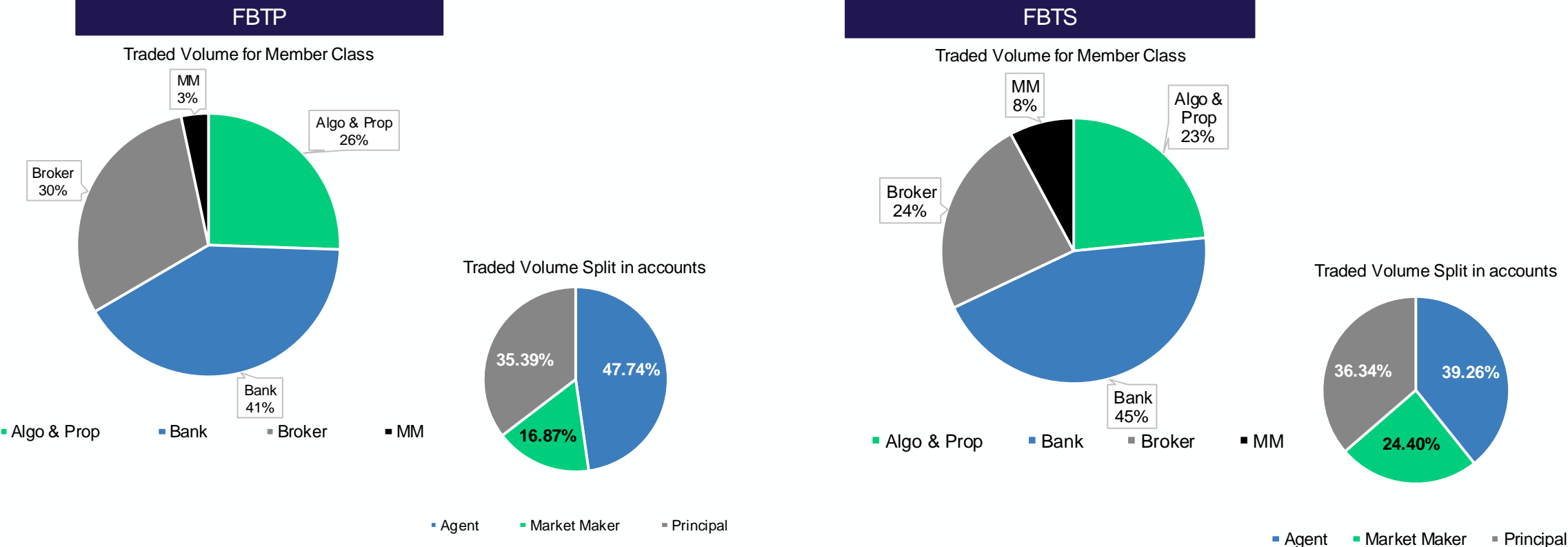
- FBTP/FBTS together with FOAT continues to be the most successful growing futures contract in volume terms
- ADV now stands at 117 k contracts for FBTP and 97k in FBTS
- In the 10Y segment the market share of FBTP equals 13% of the overall 10Y futures volumes



Maintenance / Initiatives

- In July, contract specifications were changed to exclude the newly created 'BTP Futura' bonds, from being deliverable into the Italian FI futures, it being a retail-focused product
- In October, FBTS contact specifications revised to harmonize the obligations for physical delivery that only debt securities of the Republic of Italy with an original term of no longer than 26 years are deliverable
- Plans to launch an Ultra-BTP futures delayed due to developments with the EU Commission's NGEU bonds

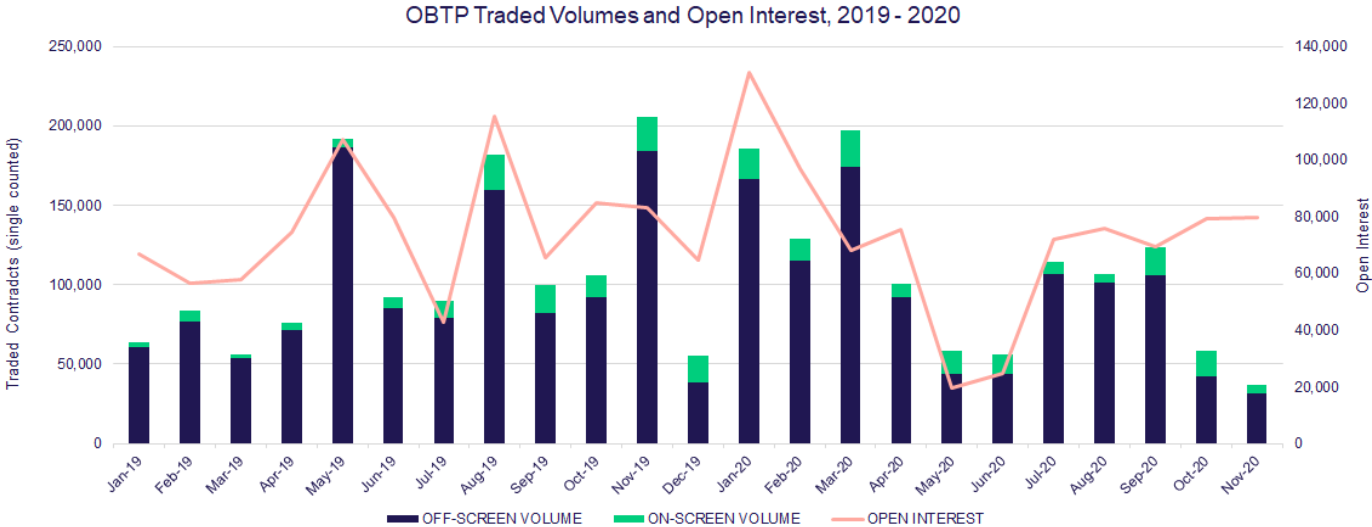
Global customer structure at Eurex for Italian Futures



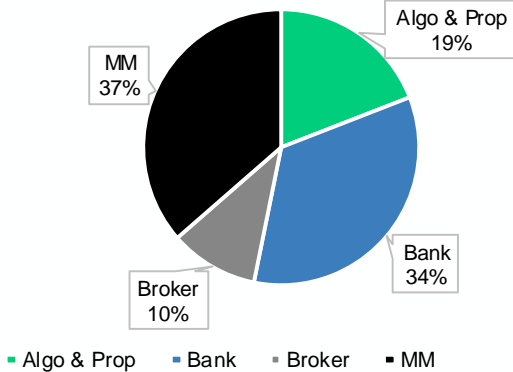
Global customer structure

- The concentration of trading volume among Eurex members in FBTP and FBTS is comparable and remained stable over the last years
- The top 20 members accounted for over 65% and 76% of the volume in futures (FBTP and FBTS respectively) and 97% in the BTP options, a stable ratio compared with 2019

Geopolitical risks and volatility in the underlying cash market have supported the development in OBTP volume & open interest



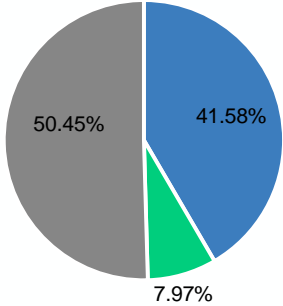
OBTP - Cleared Volume for Member Class



OBTP Volume and OI

- BTP options had a vibrant first quarter in 2020 and ended HY1 2020 up 11% vs. 2019, volume traded 5.604 contracts ADV (10 times OOAT volume)
- In contrast to the futures about 91% of OBTP volume is created via Eurex off-book functionalities (similar to FI options)





OBTP - Cleared Volume Split in accounts




3

Market Trends & Product Roadmap

Eurex adapts its product roadmap to benefit from market trends

-  The **COVID19 outbreak** continues to severely impact the EU economy
-  **Monetary and fiscal stimulus** measures were activated by ECB and EU countries
-  **QE programme** was reinforced while sovereign debt issuance spiked
-  Next Generation **(NG)EU bonds** will be the first example of European **debt mutualization**



Effect on Sovereign yields

- **Highly-rated** Sovereign yields continued to stay **negative**
- The ECB QE program induced:
 - Sovereign yield **compression**
 - **Lack of volatility** in EU interest rates
- Such environment favors **long-dated** debt securities due to their **higher yield**

Fixed Income structural trends

-  The introduction of the NGEU bonds will introduce a new credit point in the EU yield curve and generate new trading opportunities given the planned issuance size of EUR 750bn
-  Migration to strategy execution via central limit order-book and dark pools by end-clients as they increase the use of algorithmic and smart order execution facilities
-  Buy-side and sell-side clients are slowly moving away from OTC markets to electronic execution in the FI space
-  The sustainability theme has deepened its footprint into the fixed income space and is now a mainstream theme among end-clients
-  Increasing demand for single currency risk with one CCP to leverage significant cross-margin offsets with OTC cleared products

Euro-Buxl Options

- Options on Euro-Buxl futures were launched on September 28, 2020
- Investors are now able to hedge long-term exposure to European AAA debt in a non-linear fashion with Buxl Options

NGEU bond futures

- NGEU Bonds are the new incumbent
- Eurex will support them in the derivatives market offering futures similarly to EU Sovereign bonds
- In parallel, with an increasing demand for long-dated European debt, Eurex aims to gradually cover the remaining European yield curve credit and tenor debt in alignment with the developments in Europe

ESG futures

- Optimized capital usage and costs of trading with ESG Corporate bond index futures
- Ability to get optimal long and short exposure to the ESG FI broad markets with liquid and established index futures

Buxl Options successfully launched with LP and brokerage support

Highlights at launch

- **43 exchange members** traded to date using the entire options toolbox with outright options, Call and Put Spreads as well as various structures of Butterflies.
- On-book liquidity is given for first two expiries, **with spread widths of ca. 5-15% with quote sizes of 20 to +50 contracts** on the best bid-offer.
- **Over 52.000 contracts** traded as of Nov 24, open interest stands at 12,500 contracts (following recent expiry) with an ADV at almost 2,000 contracts. 2,500 Put Spreads done in three clips so far biggest trade to date.

On-book pricing tightens

CBQty	CBid	CAsk	CAQty	Contract	PBQty	PBid	PAsk	PAQty
50	8.10	9.44	50	OGBX Dec20 21800	30	0.68	0.84	30
25	7.40	8.28	25	OGBX Dec20 21900	30	0.82	0.98	30
25	6.58	7.46	25	OGBX Dec20 22000	30	1.00	1.16	30
25	5.80	6.68	25	OGBX Dec20 22100	20	1.20	1.38	20
45	5.04	5.92	25	OGBX Dec20 22200	20	1.44	1.62	20
70	4.44	5.22	45	OGBX Dec20 22300	20	1.70	1.90	20
20	3.78	4.52	20	OGBX Dec20 22400	20	2.02	2.24	20
70	3.18	3.90	20	OGBX Dec20 22500	20	2.40	2.62	20
20	2.82	3.08	20	OGBX Dec20 22600	20	2.84	3.06	20
20	2.34	2.56	20	OGBX Dec20 22700	20	3.34	3.56	20
20	1.90	2.12	20	OGBX Dec20 22800	20	3.90	4.14	20
20	1.54	1.74	20	OGBX Dec20 22900	20	4.30	5.04	70
20	1.22	1.42	20	OGBX Dec20 23000	45	4.96	5.84	25
30	0.96	1.16	30	OGBX Dec20 23100	25	5.70	6.58	25
30	0.76	0.94	30	OGBX Dec20 23200	25	6.48	7.36	25
30	0.60	0.76	30	OGBX Dec20 23300	25	7.30	8.18	25
25	0.48	0.62	40	OGBX Dec20 23400	50	7.86	9.20	50

...to meet investor demand

Liquidity

- **Robust** settlements and price history of 30Y volatility
- 50 delta quoted with spread of 8%
- **LPs service flow** in trade sizes of 50, 100 and yet higher

Opportunity

- Full coverage of tenors for optionality on German yields
- X-currency, curve trading and bespoke positioning in highly interesting rates segment
- Complement OTC swaptions flow for bank volatility desks

Update on the “Next Generation EU-Bonds”

Facts and Market expectations



- In July, the EU Commission (EuC) approved a 750bn program under the European “**Next Generation Recovery Fund**” as an instrument to address the Covid-19 crisis
- Under the **SURE program** (decided in March 20) bonds for 100bn will be launched in 2020 and 2021
- To temporarily increase EU’s own resources, the **ratification** of the decision by the EU parliament and all 27 member states is required to allow the EuC to borrow from markets and thus **finance disposal of grants starting in 2021**
- A yearly issuance volume between **200 and 240bn Euro** is expected over the next 3-4 years. The **repayment** of the €750bn will be arranged through future EU budgets in the years **2028-2058**
- On Tuesday October 20, the EuC successfully issued their **first SURE bonds**, a total of **EUR 17bn** debt issuance in the 10- and 20-year maturities attracted a demand for EUR 233bn

Structural Changes

NGEU Bonds

- The issuance of “New Generation EU-Bonds” will create a **new liquidity pool** with a **Triple-A** rating
- The EuC wants to built a new **European yield curve** representing the new **benchmark** (in competition to established yield curves)
- Furthermore the EuC wants to become **the biggest green bond issuer** in Europe and world wide

Impact on European FI Market

- Given the high volumes,an auction model is considered, making those bonds more “**govies look-a-like**” despite having an **SSA character**
- Each NGEU bond is considered with **10bn**, thus requiring a **regular issuance policy** to cover the yearly funding target
- A **liquid repo and listed futures** market is important to support this development

NGEU futures

Objectives

- **Expansion** of Eurex’s **offering** to the pan-European yield curve
- **Support the development** of a new market segment for Europe
- **Initial discussions** with a small group of market participants as well as national treasuries were held to **align on expected market developments** and possible framework for such new future(s)

Next step: Topics to be discussed

- Several key points for the launch of NGEU bonds are still not made public by the EuC, which will have a decisive impact on the **design of new futures**:
- Bond tenors, the final methodology of issuance (a combined syndication and auction model is expected), issuance frequency of the bonds,...
- Taking this into account, further topics need to be considered:
- The **right timing** considering issue frequency and size of deliverable basket(s)
 - Definition of **notional futures coupon** (0% or 6%) to increase/decrease CTD switches
 - **Support of liquidity** by market participants for the futures; initial feedback is positive
 - Impact on trading volumes of **existing futures**
 - End client **readiness/ willingness** to trade those NGEU from the beginning (acceptance by non-EU investors)

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