

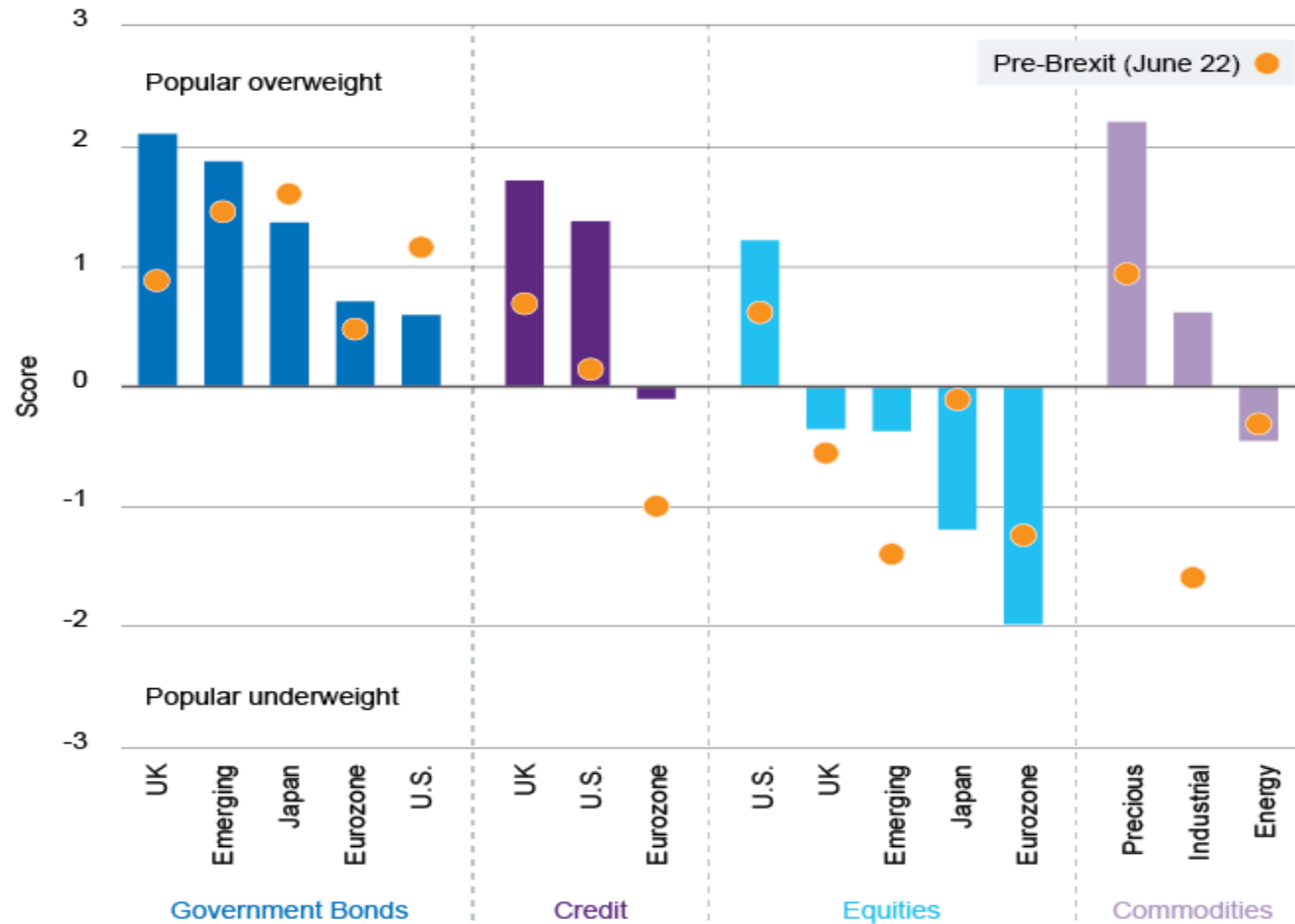
# Eurex - Fixed Income Products and Trading Strategies

September 2016



# Position across asset classes – August 2016

- Analysis of fund flows, fund positioning and price momentum
- The most popular investments today: overweights to UK government bonds (gilts), emerging market (EM) sovereign debt, developed market credit and gold, and an underweight to eurozone equities



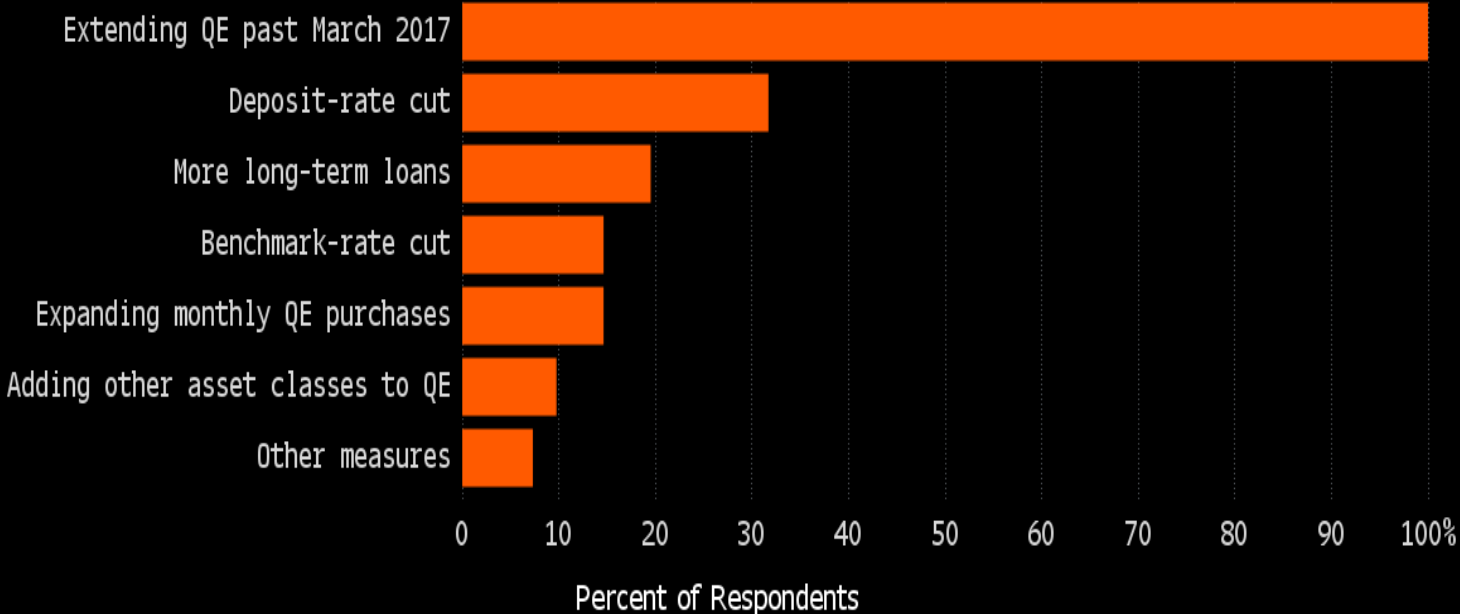
Sources: BlackRock Investment Institute, Bloomberg, EPFR and State Street. August 2016.

Notes: Data are based on BlackRock's analysis of portfolio flows, fund manager positions as reported by State Street and price momentum. Scores show standard deviations. A positive score means investors are overweight the asset class; a negative score indicates the reverse. The higher the score, the more popular the overweight is. The lower the score, the more popular the underweight is.


## ECB plans

### What's Next From the ECB?

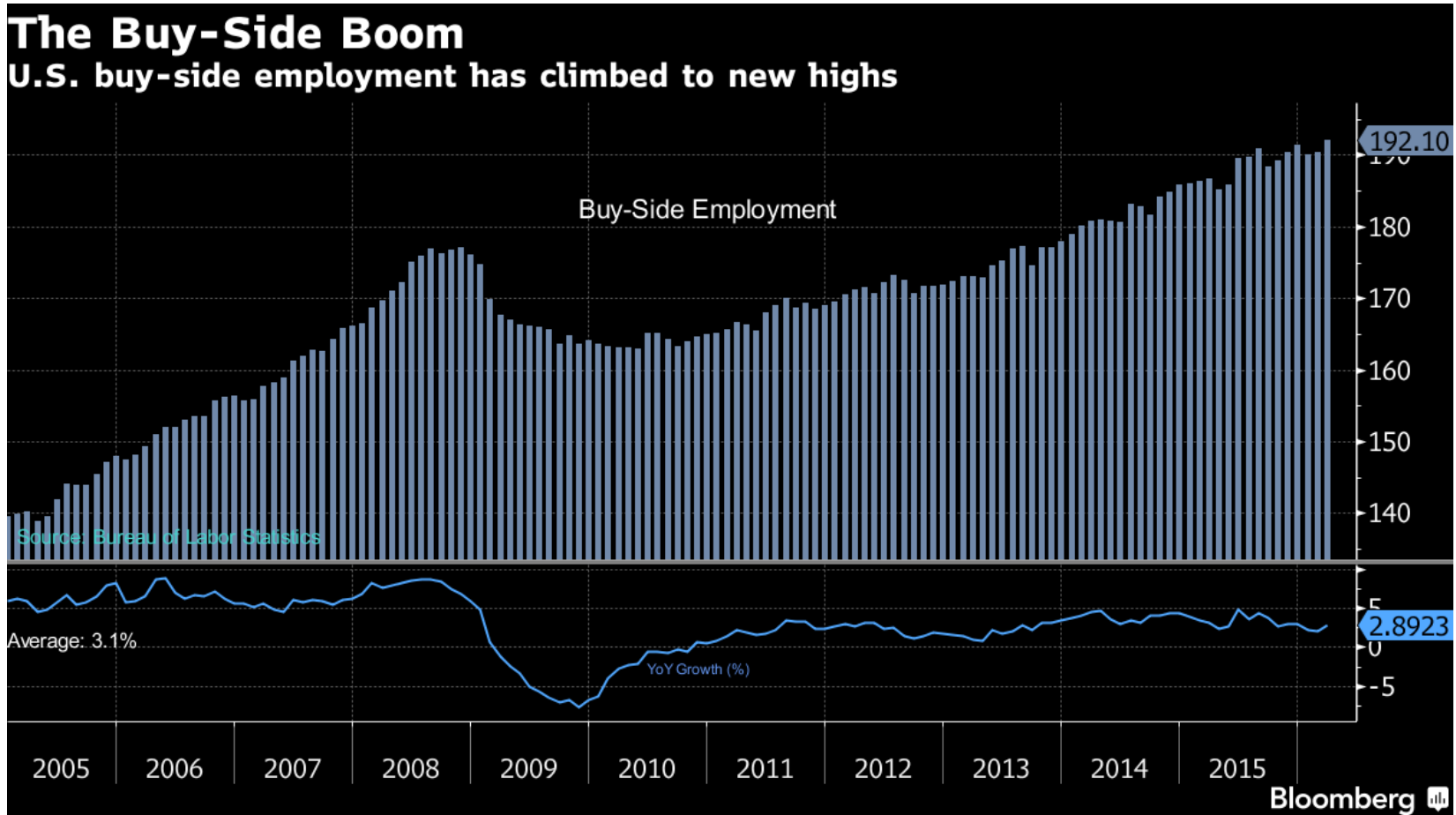
Four in five economists predict more ECB stimulus, with most anticipating an extension



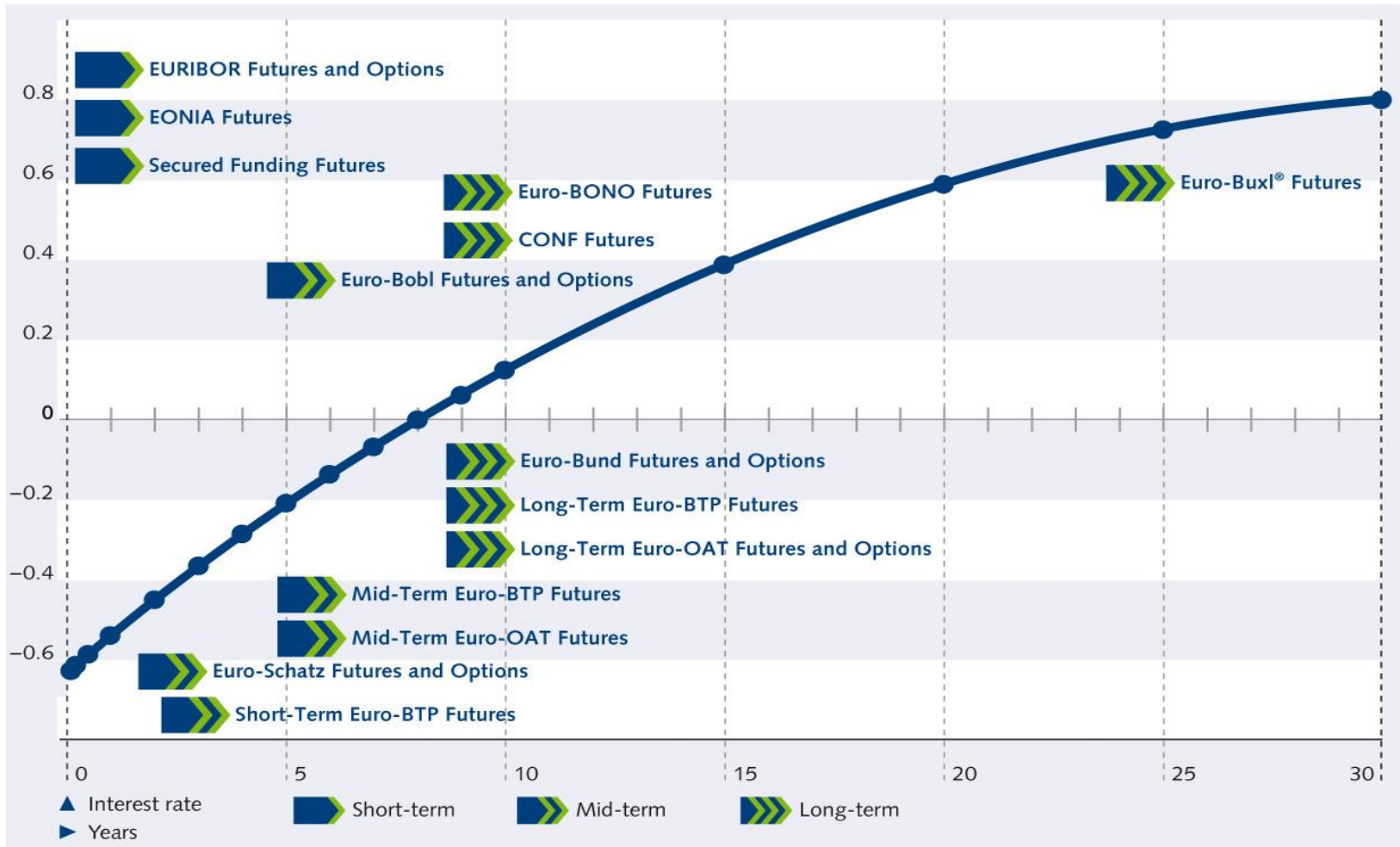
Source: Bloomberg survey of 50 economists conducted Aug. 30-Sept. 1

Bloomberg 

# Market shifts - the rise of the buy-side



# Eurex Exchange: home of the euro yield curve



# Short term opportunities

## Corporate Bond Index Futures on EURO STOXX 50® components

|   |   |
|---|---|
| <p><b>Index</b></p>                             | <ul style="list-style-type: none"> <li>• EURO STOXX 50® equity index is an established European benchmark, covering the Top 50 companies from the Eurozone</li> <li>• Corporate Bond Index on EURO STOXX 50 components was launched on April 7, 2016 by STOXX</li> <li>• The corporate bond index measures the performance of EUR-denominated bonds issued by the EURO STOXX 50® companies</li> <li>• Positive response from ETF providers as well as issuers of structured products for combined approach with index and futures</li> </ul>  |
| <p><b>Market environment and challenges</b></p> | <ul style="list-style-type: none"> <li>• The given development of the ETF market and the impact on fixed income assets under management, STOXX and Eurex evaluated the possibility to launch an Index combined with a future to offer the market a hedging alternative in the corporate bond market.</li> <li>• First market consultations supported the idea of a cash settled future on the described EURO STOXX® 50 index, with a quarterly expiry and a nominal of EUR 100.000 priced in percentage terms.</li> <li>• The corporate bond market has multiple interfaces, interested in the advantage of an exchange cleared hedging alternative in regards to counterparty risk, delivery default and optimization of balance sheet.</li> <li>• Corporate bonds will benefit from ECB decision to include them to the asset purchase program</li> </ul> |

# Short term opportunities

## Fixed Income ETF Market

### Fixed Income ETF Market

- With global fixed-income markets still facing challenges following the financial crisis, FI exchange traded funds (ETFs) are taking an increasingly vital role in institutional portfolios
- Investors are increasing their use of bond ETFs besides individual bond holdings, or in lieu of futures and other derivatives.
- ETFs are also used to create overlays designed to enhance overall portfolio liquidity

### Market environment and challenges

- While institutions of all types have struggled with reduced liquidity in bond markets, ETFs have not suffered the same fate. Since 2008, bond ETF liquidity has grown more than four and a half times or at an annual growth rate of 33%. Among a subset of the largest ETFs, growth in liquidity has significantly outstripped asset growth, implying that there is a sizable population of investors actively trading and driving the velocity of these funds
- For Fixed Income ETFs, there are no hedging instruments available apart from iTraxx instruments. Therefore, more demand for options products is expected compared to options on equity index ETFs where alternative hedging instruments are listed and highly liquid

## Overview: Potential iShares ETF underlyings for options listing on Eurex

| No. | ISIN         | Bloomberg | Name   | Performance Tracking                                      | Currency |
|-----|--------------|-----------|--|---|----------|
| 1   | IE00B66F4759 | IHYG LN   | iShares Euro High Yield Corporate Bond ETF       | Markit iBoxx EUR Liquid High Yield Index                  | EUR      |
| 2   | IE00B3F81R35 | IEAC LN   | iShares Euro Corporate Bond ETF                  | Barclays Euro Corporate Bond Index                        | EUR      |
| 3   | IE00B2NPKV68 | IEMB LN   | iShares J.P. Morgan USD Emerging Market Bond ETF | J.P. Morgan Emerging Markets Bond Index Global Core Index | USD      |

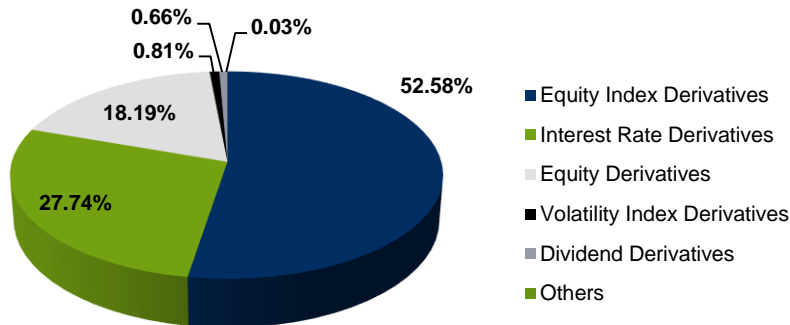
# Volume developments



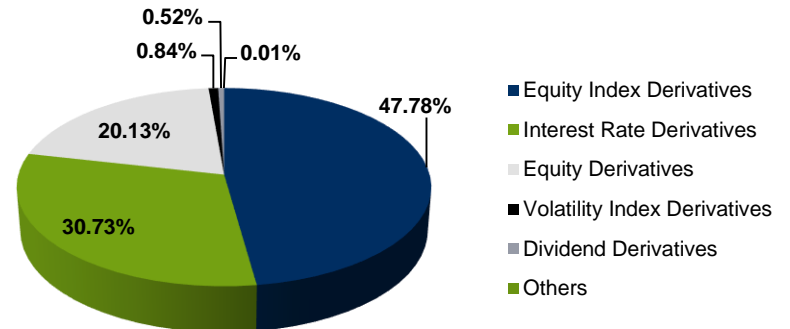
# Interest rate derivatives at Eurex

- Interest rate derivatives constitute a major segment of products offered by Eurex.
- Over 290 million contracts of interest rate derivatives were traded in 2016 as of end of July
- This accounts for about 28% of all trades in Eurex.
- Following charts summarize volume breakdown at Eurex in 2016 and 2015 (YTD July):

Volume Breakdown By Asset Class - 2016



Volume Breakdown By Asset Class - 2015



# Eurex Exchange's fixed income futures & options: highlights of Q2 / 2016

- Markets made a confident start into Q2. The U.K.'s vote to leave the EU overshadowed other developments by the end of June. But Fixed Income Derivatives volumes remained relatively robust:
  - A total of 128 million Fixed Income Futures and Options were traded in Q2 2016. While Futures were almost unchanged, volumes on the smaller option segment decreased.
  - In the core market only the Euro-Buxl® Futures contracts increased, and are up by roughly 8%.
  - There was a lack of clear trading trend, as some players chose to move up the curve while others were more active in non-German assets.
    - Short-Term Euro-BTP Futures had higher flows by 11.8 %, after an increase of 25% in the Q1 comparison.
    - The CONF Futures, based on notional short-, medium- or long-term debt instruments issued by the Swiss Confederation, were up over 50%
- The key interest rates for the euro area – remained unchanged since March 16
- The interest rate on the main refinancing operations (MRO), which provide the bulk of liquidity to the banking system. 0%
- The rate on the deposit facility, which banks may use to make overnight deposits with the Eurosystem. - 0.40%
- The rate on the marginal lending facility, which offers overnight credit to banks from the Eurosystem. - 0.25%

# Top products at Eurex

- Benchmark fixed income futures, Bund, Bobl and Schatz futures, are three of the highest traded products at Eurex.
- Also prominent are the BTP and OAT futures, which have become increasingly attractive over the years.
- Following table shows the top 20 products by volume:

| Rank | Product Name                   | Product ID | YTD July 2016 | YTD July 2015 | Variation |
|------|--------------------------------|------------|---------------|---------------|-----------|
| 1    | EURO STOXX 50® Index Futures   | FESX       | 238,417,850   | 190,226,974   | 25.33%    |
| 2    | EURO STOXX 50® Index Options   | OESX       | 181,383,450   | 177,942,428   | 1.93%     |
| 3    | Euro-Bund Futures              | FGBL       | 103,846,888   | 107,948,201   | -3.80%    |
| 4    | Euro-Bobl Futures              | FGBM       | 74,654,636    | 70,774,784    | 5.48%     |
| 5    | Euro-Schatz Futures            | FGBS       | 38,972,297    | 39,684,398    | -1.79%    |
| 6    | EURO STOXX® Banks Futures      | FESB       | 24,712,431    | 14,598,340    | 69.28%    |
| 7    | Options on Euro-Bund Futures   | OGBL       | 20,069,357    | 31,883,960    | -37.06%   |
| 8    | Banco Santander                | SANG       | 17,945,825    | 2,567,939     | 598.84%   |
| 9    | DAX® Options                   | ODAX       | 17,366,706    | 26,752,425    | -35.08%   |
| 10   | DAX® Futures                   | FDAX       | 16,700,535    | 17,849,122    | -6.43%    |
| 11   | Euro-BTP Futures               | FBTP       | 15,983,439    | 15,618,714    | 2.34%     |
| 12   | Euro-OAT-Futures               | FOAT       | 15,103,103    | 12,825,505    | 17.76%    |
| 13   | EURO STOXX® Banks Options      | OESB       | 14,751,730    | 8,084,352     | 82.47%    |
| 14   | KOSPI 200                      | OKS2       | 13,152,205    | 13,254,350    | -0.77%    |
| 15   | Options on Euro-Schatz Futures | OGBS       | 7,651,263     | 9,274,156     | -17.50%   |
| 16   | SMI® Futures                   | FSMI       | 7,386,973     | 6,275,054     | 17.72%    |
| 17   | STOXX® Europe 600              | FXXP       | 6,806,930     | 2,778,839     | 144.96%   |
| 18   | Deutsche Bank                  | DBK        | 6,641,434     | 5,018,775     | 32.33%    |
| 19   | Euro-Buxl® Futures             | FGBX       | 6,230,131     | 5,614,695     | 10.96%    |
| 20   | Nokia                          | NOA3       | 6,054,577     | 5,680,653     | 6.58%     |

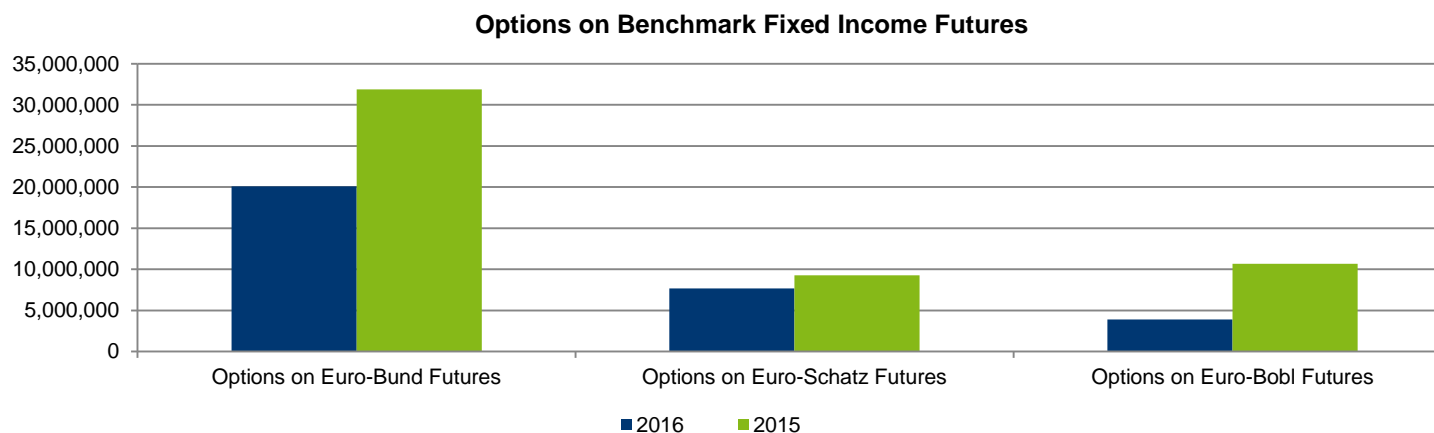
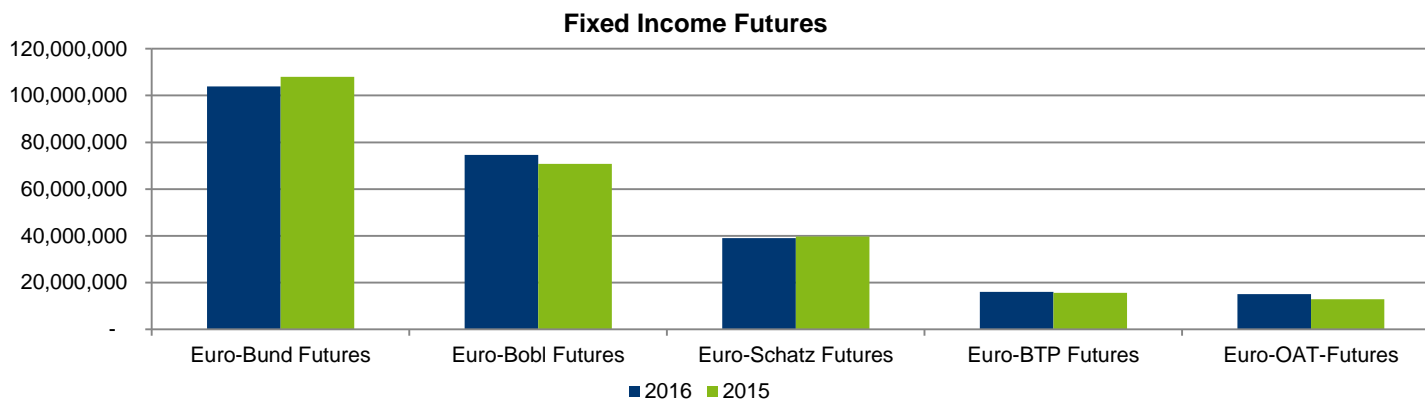
# Top interest rate derivatives at Eurex

- The table below focuses on the top interest rate derivatives at Eurex.
- As can be seen, BTP and OAT futures are the most traded products after the benchmark futures and the Options on Bund futures.

| Rank | Product Name                           | Product ID | YTD July 2016 | YTD July 2015 | Variation |
|------|--|------------|---------------|---------------|-----------|
| 1    | Euro-Bund Futures                      | FGBL       | 103,846,888   | 107,948,201   | -3.80%    |
| 2    | Euro-Bobl Futures                      | FGBM       | 74,654,636    | 70,774,784    | 5.48%     |
| 3    | Euro-Schatz Futures                    | FGBS       | 38,972,297    | 39,684,398    | -1.79%    |
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| 7    | Options on Euro-Schatz Futures         | OGBS       | 7,651,263     | 9,274,156     | -17.50%   |
| 8    | Euro-Buxl® Futures                     | FGBX       | 6,230,131     | 5,614,695     | 10.96%    |
| 9    | Options on Euro-Bobl Futures           | OGBM       | 3,873,814     | 10,661,873    | -63.67%   |
| 10   | Short Term Euro-BTP-Futures            | FBTS       | 3,865,372     | 3,335,660     | 15.88%    |
| 11   | Three-Month EURIBOR Futures            | FEU3       | 117,039       | 216,375       | -45.91%   |
| 12   | Euro-Bono Futures                      | FBON       | 76,006        | -             | -         |
| 13   | Bund Weekly Options - Week3            | OGB3       | 60,387        | 108,573       | -44.38%   |
| 14   | CONF Futures                           | CONF       | 53,153        | 55,394        | -4.05%    |
| 15   | Bund Weekly Options - Week2            | OGB2       | 52,899        | 156,076       | -66.11%   |
| 16   | Bund Weekly Options - Week1            | OGB1       | 49,373        | 180,604       | -72.66%   |
| 17   | Bund Weekly Options - Week5            | OGB5       | 39,456        | 41,242        | -4.33%    |
| 18   | Mid-Term Euro-OAT-Futures              | FOAM       | 6,470         | 37,584        | -82.79%   |
| 19   | Options on Three-Month EURIBOR Futures | OEU3       | 5,100         | 174,238       | -97.07%   |
| 20   | 2 YEAR MID-CURVE OPTIONS               | OEM2       | 5,000         | 245,000       | -97.96%   |

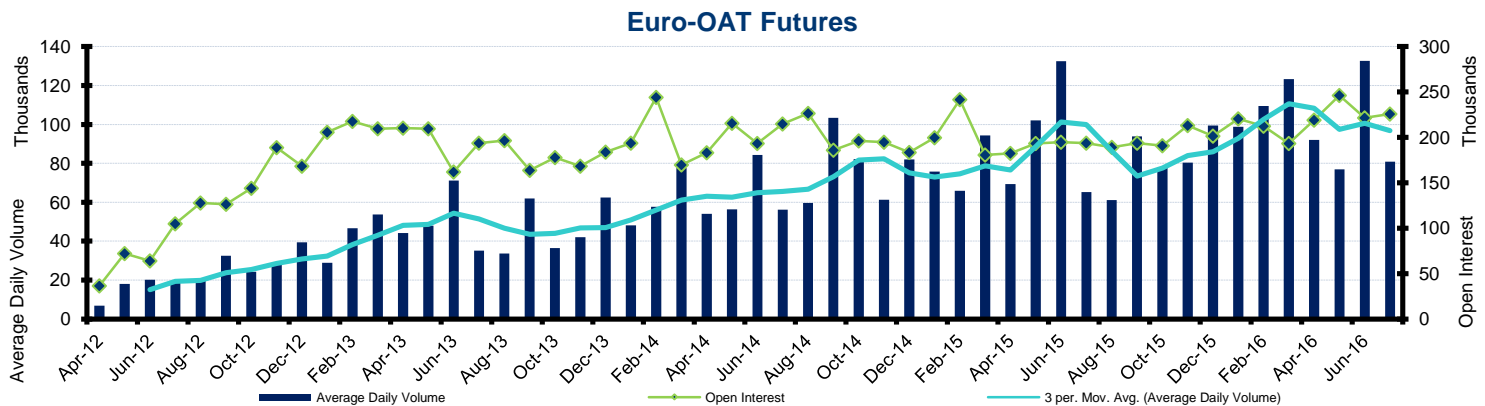
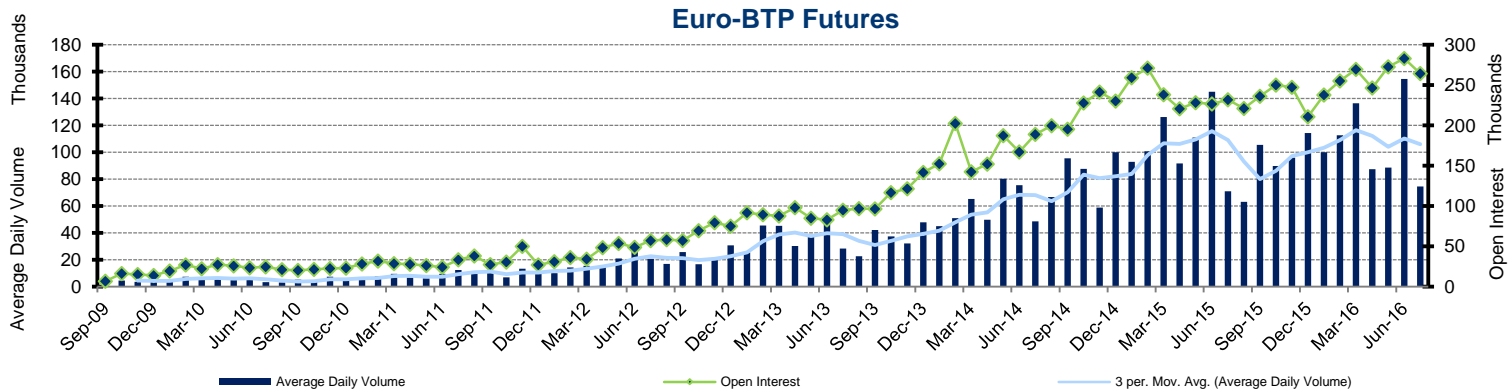
# Fixed income futures and options on fixed income futures

- The following charts capture volume changes in the top fixed income futures and options on fixed income futures over 2015 to 2016.



# Evolution of BTP & OAT futures

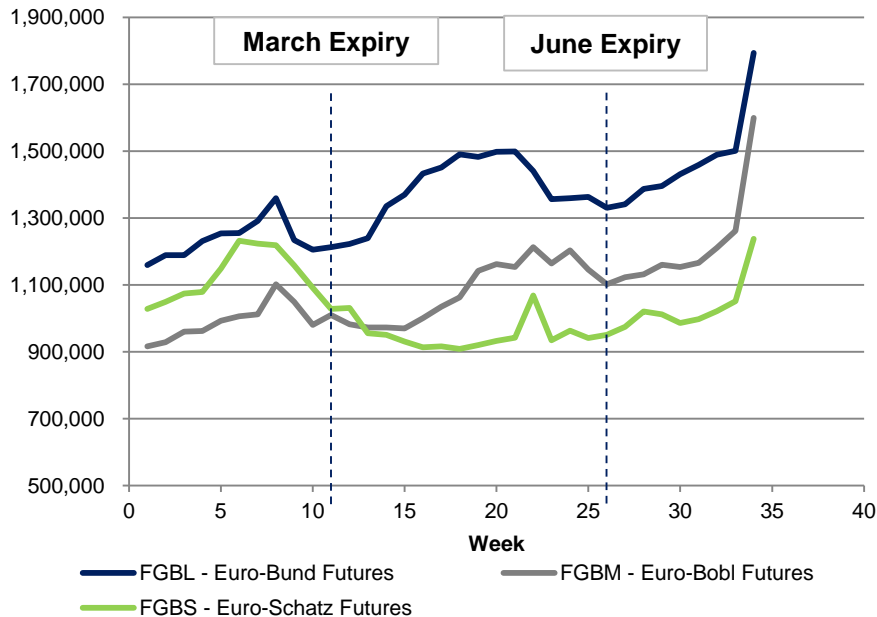
- Ever since their respective launches in 2009 & 2012, BTP & OAT futures have been regarded as efficient hedging tools not only for the Italian and French bond markets but as proxies for other Eurozone debt.
- Following charts summarize the evolution of their volumes and open interests:



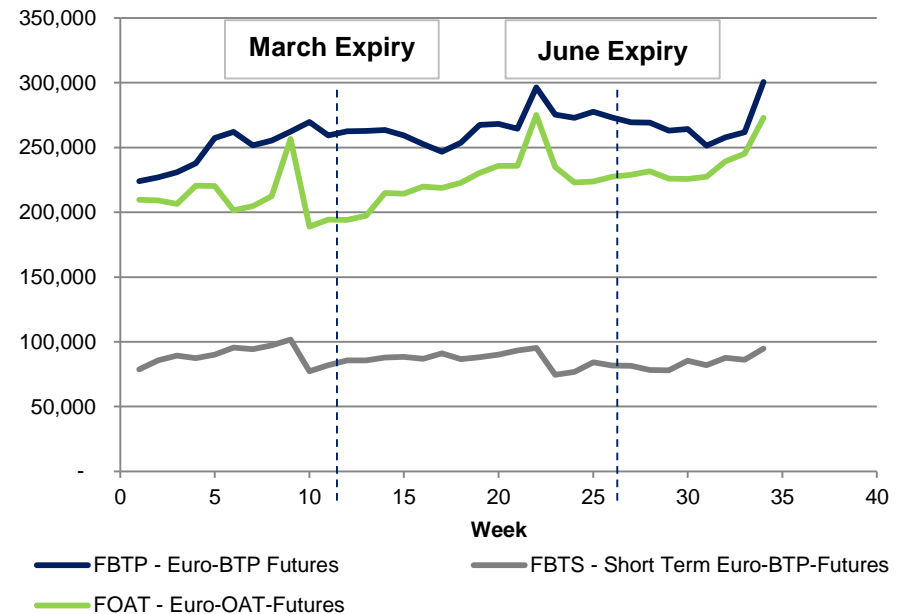
# Increasing open interests

- Following charts depict open interests in 2016 on benchmark fixed income futures and BTP, BTS and OAT futures.
- Noticeably, both charts show increasing trends in Open Interests

2016 Weekly Open Interest - German Benchmark Futures



2016 Weekly Open Interest - French & Italian Treasury Futures



## Shares of agency business and order-book trades

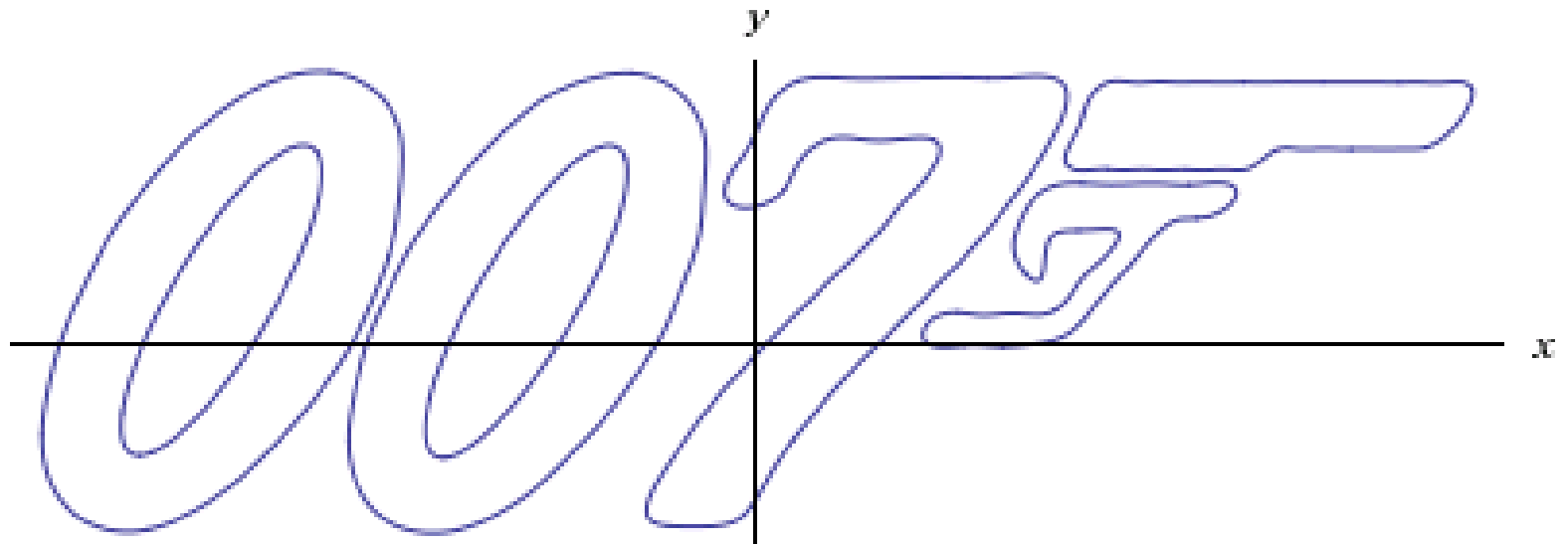
- Following table provides shares of Agency business and order-book trades by product for the periods YTD July 2016 and YTD July 2015:

| Product ID         | % A- Business - 2016 | % A- Business - 2015 | % Order-book Volume - 2016 | % Order-book Volume - 2015 |
|--------------------|----------------------|----------------------|----------------------------|----------------------------|
| CONF               | 51.92%               | 56.68%               | 100.00%                    | 100.00%                    |
| FBON               | 55.26%               | -                    | 92.13%                     | -                          |
| FBTP               | 43.11%               | 41.98%               | 91.35%                     | 90.87%                     |
| FBTS               | 35.54%               | 36.53%               | 92.07%                     | 90.89%                     |
| FEU3               | 5.00%                | 28.28%               | 94.57%                     | 99.75%                     |
| FGBL               | 34.82%               | 41.44%               | 93.08%                     | 92.15%                     |
| FGBM               | 29.61%               | 36.34%               | 92.26%                     | 90.07%                     |
| FGBS               | 44.73%               | 50.58%               | 88.82%                     | 87.49%                     |
| FGBX               | 40.73%               | 43.32%               | 92.22%                     | 90.47%                     |
| FOAM               | 74.04%               | 57.55%               | 90.19%                     | 92.32%                     |
| FOAT               | 34.12%               | 33.78%               | 92.39%                     | 89.30%                     |
| OEM1               | -                    | 100.00%              | -                          | 0.00%                      |
| OEM2               | 100.00%              | 100.00%              | 0.00%                      | 0.00%                      |
| OEU3               | 99.02%               | 99.82%               | 1.96%                      | 0.22%                      |
| OGB1               | 77.67%               | 87.93%               | 30.93%                     | 15.78%                     |
| OGB2               | 82.51%               | 84.60%               | 24.29%                     | 14.03%                     |
| OGB3               | 84.73%               | 90.56%               | 20.21%                     | 12.64%                     |
| OGB4               | 59.33%               | 50.12%               | 60.89%                     | 100.00%                    |
| OGB5               | 82.79%               | 77.22%               | 27.72%                     | 20.21%                     |
| OGBL               | 77.00%               | 75.69%               | 31.25%                     | 32.42%                     |
| OGBM               | 83.12%               | 87.68%               | 22.74%                     | 12.57%                     |
| OGBS               | 87.53%               | 90.84%               | 16.93%                     | 13.59%                     |
| <b>Grand Total</b> | <b>40.34%</b>        | <b>47.92%</b>        | <b>84.88%</b>              | <b>79.30%</b>              |



# Strategies using Eurex products

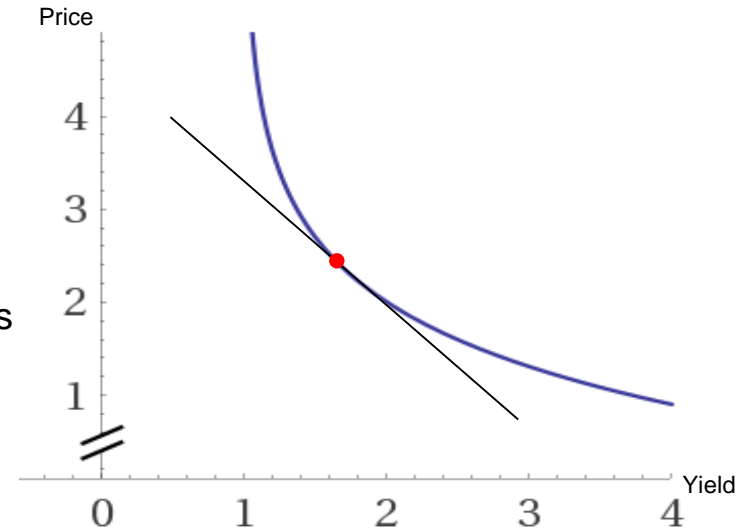
# Bond curves



(plotted for  $t$  from 0 to  $28\pi$ )

# Bond spreads 101: duration, convexity, & DV01

- **Duration**: the linear measurement of price sensitivity to a change in the yield of a bond
- **Convexity**: the rate of change in duration as changes in yield occur
- **DV01**: dollar value of a basis point
- For small moves in price, the **Duration**, being linear, gives a reasonable estimate of the new corresponding yield on the non-linear bond curve. However, as large price changes occur, straight-line Duration can no longer accurately predict new corresponding yields
- Finding the “second derivative”, the i.e. the rate of change in these Duration slope values as the yield changes becomes critical to predicting new prices. This property is called **Convexity**
- Using the convexity of the curve, one can find a more accurate Dollar Value of a One Basis Point move, or **DV01**
- DV01 values depend on where yield and price currently are: a point with low yield/high price will require a large price move to change to a new yield; a point with high yield/low price will not require much of a move at all to change the yield
- Only DV01's derived from a bond's convexity will allow a trader to spread properly

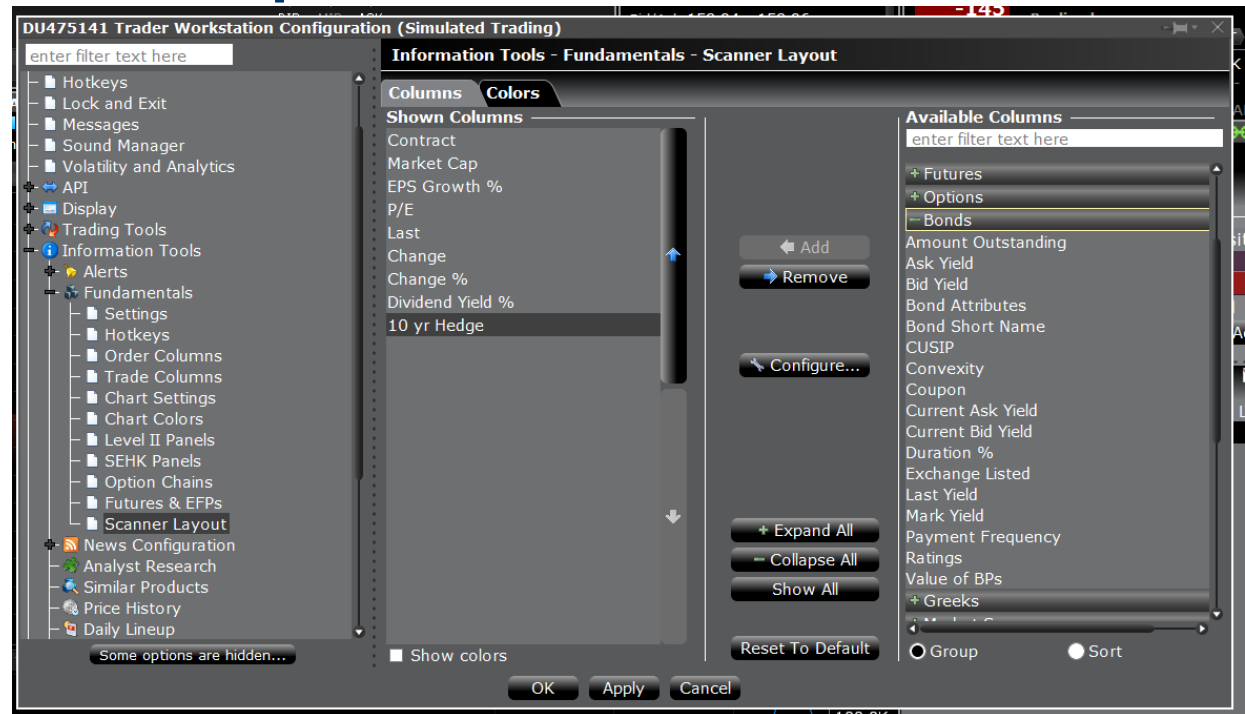


# Types and benefits of bond futures spreads

- A spread is the simultaneous holding of a short and long position in two or more related products (each position is a leg of the spread), often called a hedge or strategy when options are involved
- Types of spreads:
  - Relative Value (RV) Spreads with Futures and Cash products
    - Basis: futures contract versus underlying cash or spot instrument (bond basis)
    - Calendar: futures contract of one expiration month versus the same product's futures contract with a different expiration month (often used as a roll spread at front month expiry or to hedge/speculate along a term structure in oil, gas, and ags); also known as an intra-commodity spread
    - Inter-Commodity: futures/cash contract of one part of yield curve or nation vs a futures/cash product of another part of yield curve or nation; e.g., 2-year Italian futures contract vs 10-year Italian futures contract (often called “Twos Tens”) or 10-year German futures v 10-year French futures (credit spread)
    - Butterfly Spread: three-legged spread across subsequent expiries in term structure
- Benefits
  - Less Risk: by reducing the directional risk of a single contract, spreading allows for directional risk to play a lesser part in determining the level of loss/gain
  - Less Margin: because the products in a spread are related, the short/long nature of the spread often reduces the necessary margin required to execute and maintain the position

# DV01s and bond futures spreads

- The dollar value of a one basis point move (DV01) in each leg of a spread is important as the ratio of those DV01's dictate the proper hedge between products
- As an example, if the DV01 of the Bund future is 10 euro and the DV01 of the Bobl future is 23 euro, then the proper spread is to short/long 2.3 Bobl for every long/short one Bund
- Since trading 2.3 contracts is impossible, the ratio must be increased proportionally until each side is whole numbers
- Note that DV01's are dynamic so when prices change, yields change, and therefore the dollar value of a basis point changes, potentially changing the hedge ratios
- Above, Interactive Brokers has a feature that estimates the ratio for U.S. Ten Years (cash vs. futures)



# Determining hedge ratios with DV01's on Bloomberg

- Using the FIHR function in Bloomberg, FIHR = Fixed Income Hedge Ratios, appropriate values are shown to dictate the position size for hedging a 100-lot of any given commodity

| RXZ6 Comdty             |                         | Fixed Income Hedge Ratios |             |                |                      |          |       |
|-------------------------|-------------------------|---------------------------|-------------|----------------|----------------------|----------|-------|
| 164.850/164.870         | 0.000/0.000             | EX @ 11:45                | 95 Buy      | 96 Sell        | 97 Settings          | -        |       |
| Trade Date              | 08/24/16                | Number of Contracts       | 100         |                |                      |          |       |
| Settle Date             | 08/25/16                | Contract Size             | 100,000 EUR |                |                      |          |       |
| 1 Cash 2 Future         |                         |                           |             |                |                      |          |       |
| Show Deferred Contracts |                         | Edit Proxy Securities     |             |                |                      |          |       |
| Security                | Price                   | Hdg Ratio                 | # Fut       | Proxy Security | C Factor             | Risk C   |       |
| <Add Security Here>     |                         |                           |             |                |                      |          |       |
| RXZ6 Comdty             | 164.88                  |                           |             |                |                      | 14.382   |       |
| 11) *RXU6               | EURO-BUND FUTURE Sep16  | 167.61                    | 0.99        | 99             | DBR 1 08/15/25       | 0.662105 | 14.54 |
| 12) *DUZ6               | EURO-SCHATZ FUT Dec16   | 111.978                   | 6.21        | 621            | BKO 0 09/14/18       | 0.902732 | 2.32  |
| 13) *OEZ6               | EURO-BOBL FUTURE Dec16  | 131.590                   | 2.34        | 234            | DBR 3 3/4 07/04/21   | 0.892844 | 6.15  |
| 14) *OATZ6              | Euro-OAT Future Dec16   | 159.65                    | 1.04        | 104            | FRTR 3 1/2 04/25/26  | 0.8245   | 13.80 |
| 15) *IKZ6               | Euro-BTP Future Dec16   | 141.67                    | 1.23        | 123            | BTPS 4 1/2 03/01/26  | 0.900517 | 11.65 |
| 16) *FBZ6               | SwISS FED BND FUT Dec16 | 167.42                    | 1.09        | 109            | SwISS 1 1/2 07/24/25 | 0.704728 | 14.38 |
| 17) *KOAZ6              | Euro-BONO Sp Gov Dec16  | 145.92                    | 1.29        | 129            | SPGB 4.65 07/30/25   | 0.910764 | 11.18 |
| 18) *UBZ6               | EURO BUXL 30Y BND Dec16 | 192.70                    | 0.37        | 37             | DBR 3 3/4 07/04/42   | 0.881152 | 38.65 |
| 19) *BTAZ6              | MidTerm Euro-OAT Dec16  | 131.22                    | 2.19        | 219            | FRTR 3 3/4 10/25/21  | 0.886687 | 6.56  |
| 20) *RXZ6               | EURO-BUND FUTURE Dec16  | 164.88                    | 1.00        | 100            | DBR 1 08/15/25       | 0.669312 | 14.38 |

- On August 24, 2016 using 100 FGBL contracts (December Bund Futures – RXZ6) as the baseline, the proper size to hedge 100 FGBL in FOAT (French Ten Year Futures) would be 104 contracts, the Bobl would be 234 contracts, the Schatz 621 contracts, and the BTP (Italian 10 Year futures), would be 123

## Leveraging hedge ratios into an opportunity

- On August 24, 2016 using 100 FGBL contracts (December Bund Futures – RXZ6) as the baseline, the proper size to hedge 100 FGBL with FOAT (French Ten Year Futures) would be 104 contracts, the Bobl would be 234 contracts, the Schatz 621 contracts, and the BTP (Italian 10 Year futures), would be 123
- If the proper size to hedge 100 FGBL contracts with FOAT (French Ten Year Futures) is 104 contracts, then reducing this particular ratio gives an approximate 1::1 relationship: small enough size by which to learn the trade with reduced required margin and directional risk, and do so with a nearly perfect hedge
- Another critical piece to spread trading is understanding correlation. The products that form a single nation's yield curve are generally highly correlated. So a Schatz – Bobl trade would work in correlation terms and thus is a very common trade. However, Bloomberg's FIHR calculation dictates that the Schatz–Bobl spread size would have to be some form of 621::234. This ratio is approximately 2.65::1, not far from 5::2, better at 13::5 but as the position grows, the spread size needs adjusting to approach 621::234. So even though correlation is high, it is not a very clean or risk-reducing trade due to size
- Fortunately, the correlation of the French 10-year to the German 10-year is usually over 93% and the DV01 ratio is simple & small (nearly 1::1), creating a sweet spot: less risk in both execution and direction
- Types of RV (relative value) spreads:
  - Yield – taking the difference in implied yields derived from the futures prices
  - Net Change – taking the days net change of
  - Price

## RV spreads

- Types of RV (relative value) spreads between two futures contracts:
  - Yield** – taking the difference in implied yields derived from the futures' prices
  - Net Change** – taking a weighted difference between each product's net change for the day relative to yesterday's closing prices
  - Price** – taking the difference between prices of similar instruments
- On Monday, September 5, 2016 9 pm CET, Bund traded at 167.27 and FOAT traded at 161.38, giving a difference of 5.89
- In late August, a simulated 1::1 Bund – FOAT Price Spread trade was executed (below) in the December 2016 contracts where after two weeks, I had only lost 70 euros and on the untouched position

The screenshot shows a trading software interface with a dark theme. At the top, there are tabs for 'Monitor', 'Portfolio', 'Favorites', 'US Movers', and 'Eurex'. Below the tabs, there are buttons for '+ PROFILE' and '+ ACCOUNT'. The main area displays a P&L summary and a table of positions.

| P&L        |  | Unrealized |        | Realized |  | Margin      |        |
|------------|--|------------|--------|----------|--|-------------|--------|
| <b>-78</b> |  |            | -225.5 |          |  | Net Liq     | 1.0M   |
|            |  |            |        |          |  | Maintenance | 2.6K   |
|            |  |            |        |          |  | Excess Liq  | 997.1K |
|            |  |            |        |          |  | SMA         | --     |

| P&L  | Portfolio         | POS | MKT VALUE | AVG PRICE | LAST   | CHANGE |
|------|-------------------|-----|-----------|-----------|--------|--------|
| 300  | GBL Dec08'16 @DTB | 1   | 164,570   | 164.772   | 164.57 | +0.30  |
| -370 | OAT Dec08'16 @DTB | -1  | -159,320  | 159.318   | 159.32 | +0.37  |
|      | EUR CASH          |     | -215      |           |        |        |
|      | USD CASH          |     | 1,000,000 |           |        |        |

- Trading highly correlated spreads is generally safer than outright but certainly can still hurt. However, due to 1::1 ratio, the Bund-FOAT is often a reasonably range-bound spread with great capital efficiency



# RV spreads: ranges

- In the months leading up to the Brexit vote, the range of the Bund-OAT price spread was 82 tics with a few strong technical indicators for getting short or long
- In Spring 2016, the June 16 Bund-FOAT price spread range was generally between 5.82 to 4.99. Every roll and cash auction can change this relationship between the two contracts as well, shifting the market away from the range of the older two contracts.



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# RV spreads: shifting

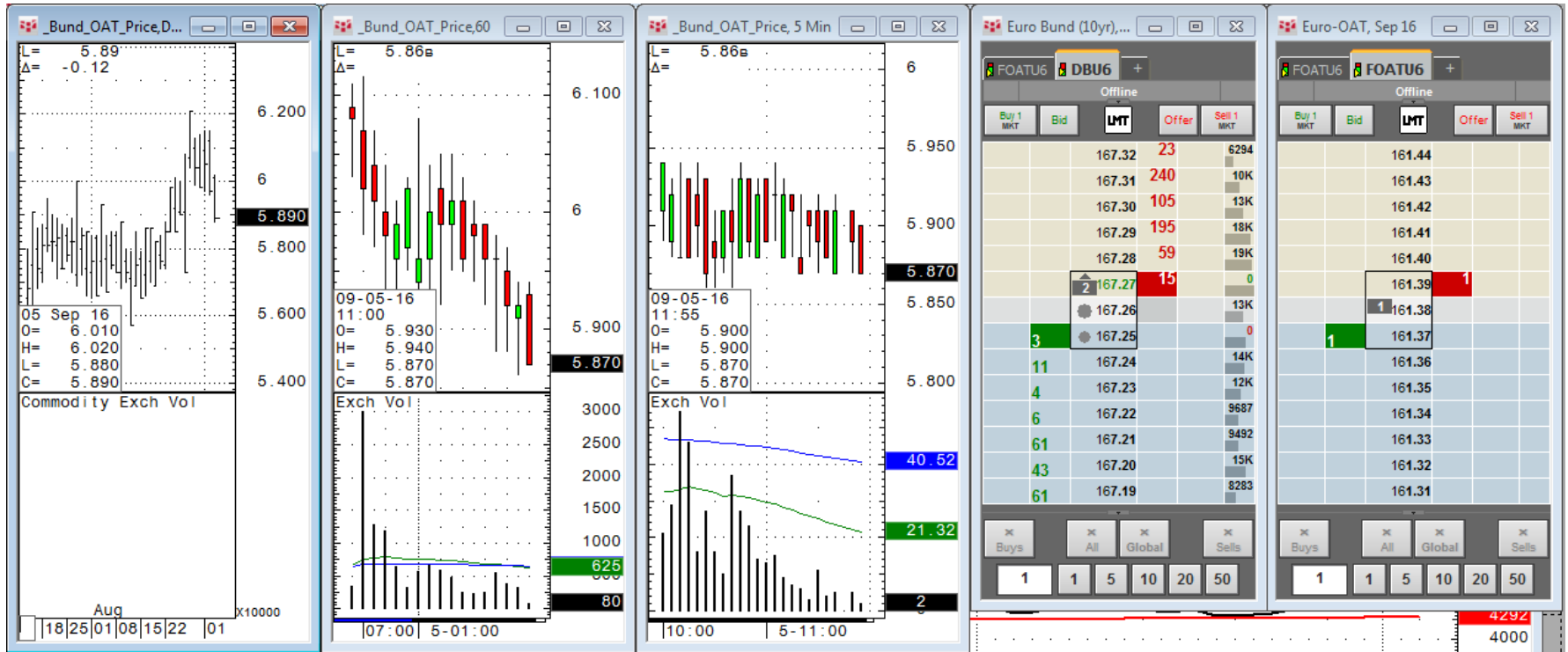
- In the summer of 2016, the Sep 16 futures contracts had a similar range-bound relationship but post-Brexit, the range itself shifted upward between 5.64 and 6.13
- While the range was reasonable (approximately 50 tics), the difference in price between the contracts grew wider, possibly due to Brexit driving buyers to the safety of German securities over their French counterparts



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# RV spreads: trading



## Events, announcements and policies shaping EU FI market

- European Central Bank's € 1.5 Trillion Quantitative Easing Program commenced in March 2015, strongly affecting EU bond market and causing scarcity in EU securities market
- Volatility and volumes: big market moves and deep liquid order-books allow for all participants to express their viewpoint and outlook regarding the region's issues
- Portugal, Italy, Greece, and Spain recently exiting EU Austerity Programs with different outcomes
- Differences in frequency and size of sovereign debt issuance among EU member states
- 0% to negative interest rate environments driving investors in many directions
- Foreign exchange effects (Swiss Central Bank decoupling from Euro; weakness in Euro currency)
- Central banks and governments outside the EU: Policy and leadership changes amid political climates from across the globe affecting EU members' economies and strategies
- Rules and regulations that are yet to be finalized and harmonized with that of other large markets
- Structural changes to social and monetary policies affecting both the long-term viability of each nation's debt and its neighbour relationships
- Political and social turmoil inside and surrounding the EU, roiling markets and creating instability

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