

The Global QE Unwind

ECB Bond Market Contact Group

26 June 2018

Agenda

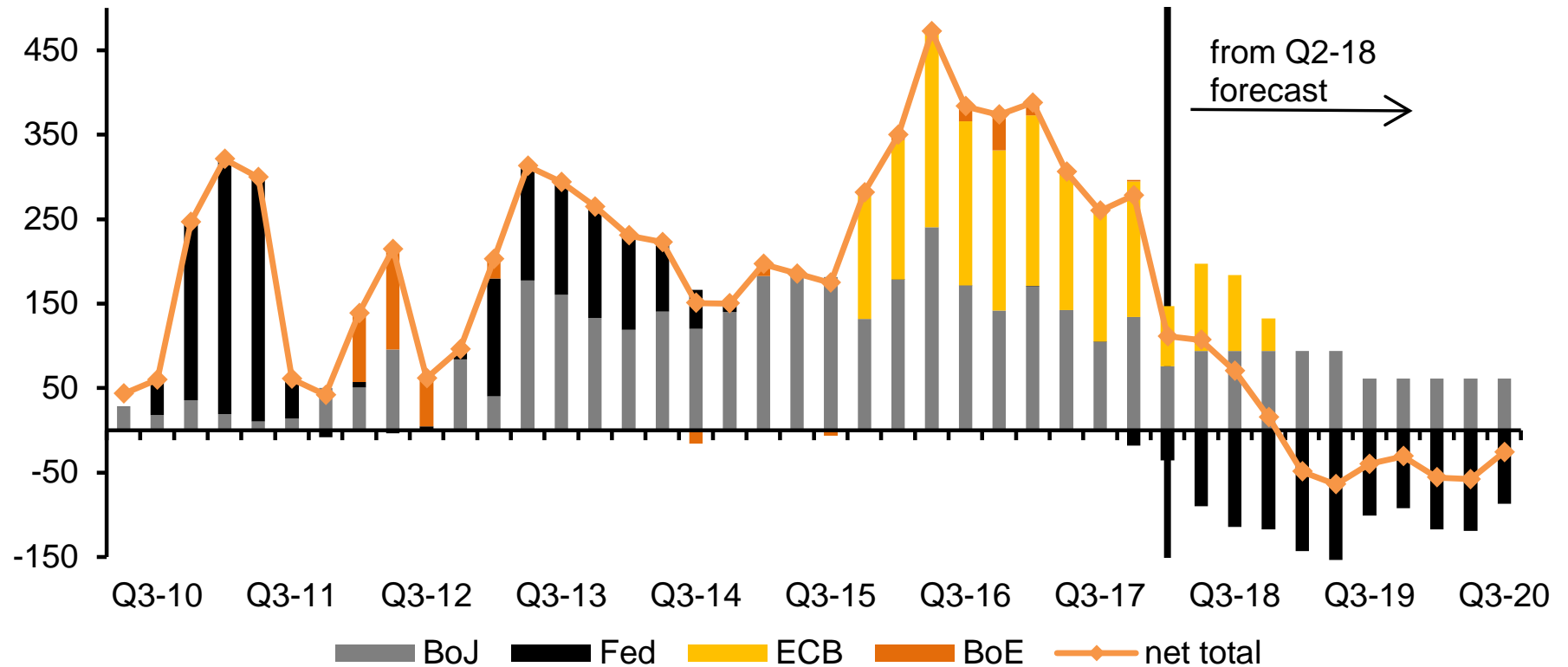
- › The global QE unwind - where do we stand?
- › Achieving a post-QE equilibrium, who will step in for central banks:
Lessons for the euro area from the US experience
- › Communication challenges
- › Discussion points



Where do we stand?

Net asset purchases projected to turn negative after 2018!

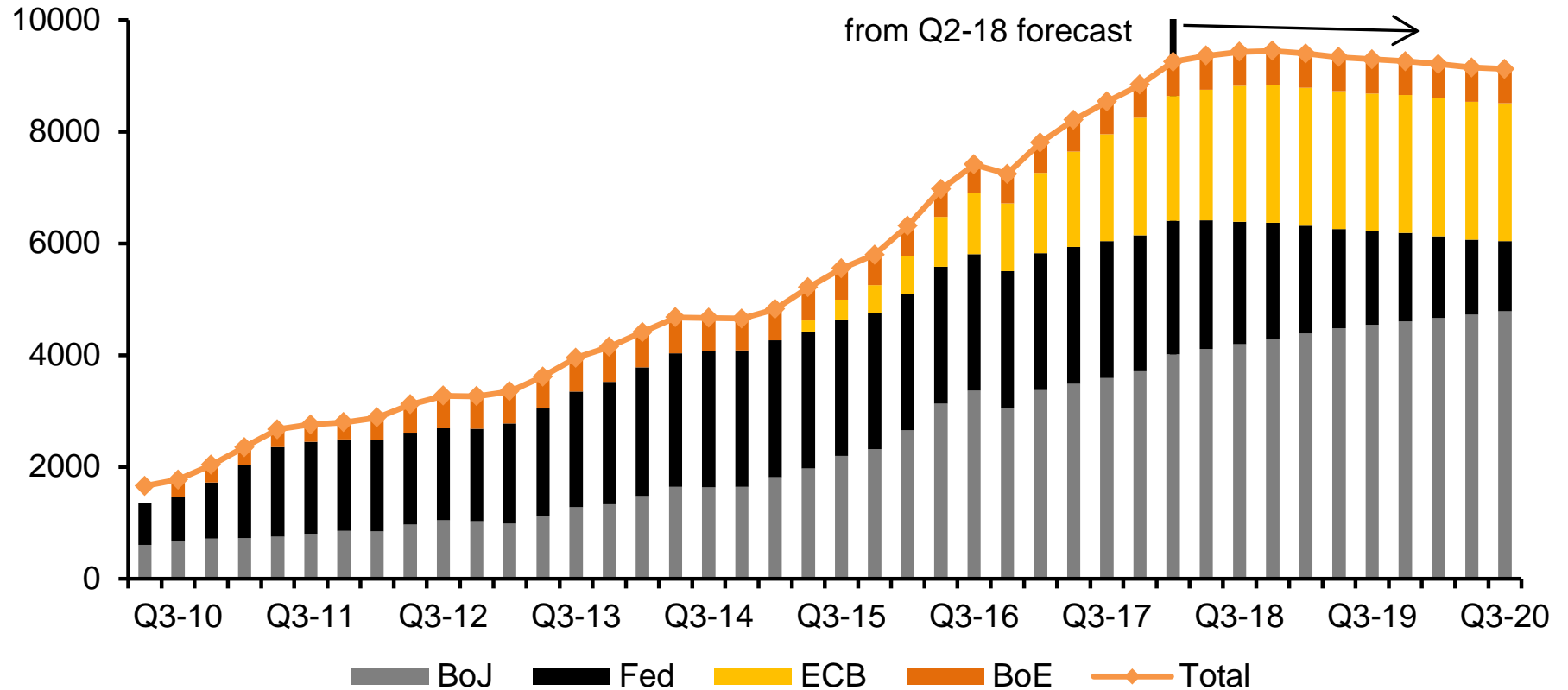
Net sovereign and MBS purchases by BoE, Fed, ECB and BoJ, quarterly data in \$ bn



Source: BoE, Fed, ECB, BoJ, Bloomberg, Commerzbank Research

Stocks vs flows – which QE unwind?

Sovereign and MBS holdings by BoE, Fed, ECB and BoJ, quarterly data in \$ bn

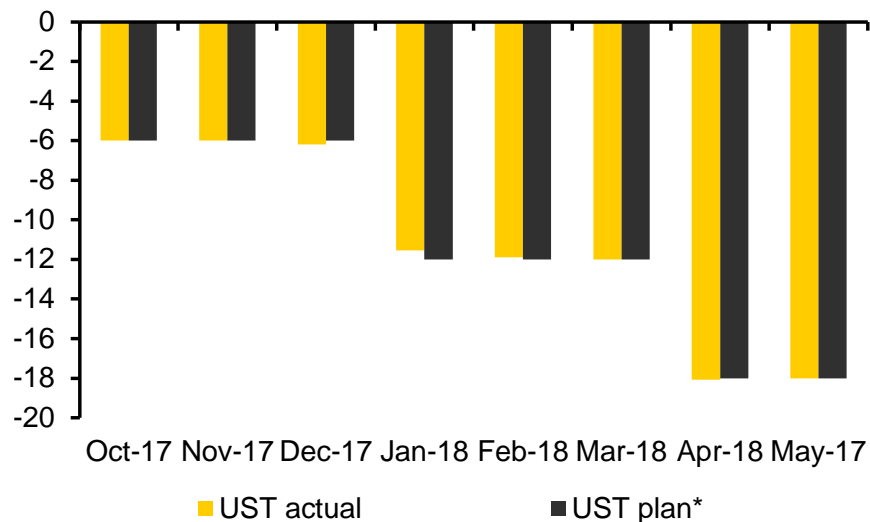


Source: BoE, Fed, ECB, BoJ, Bloomberg, Commerzbank Research

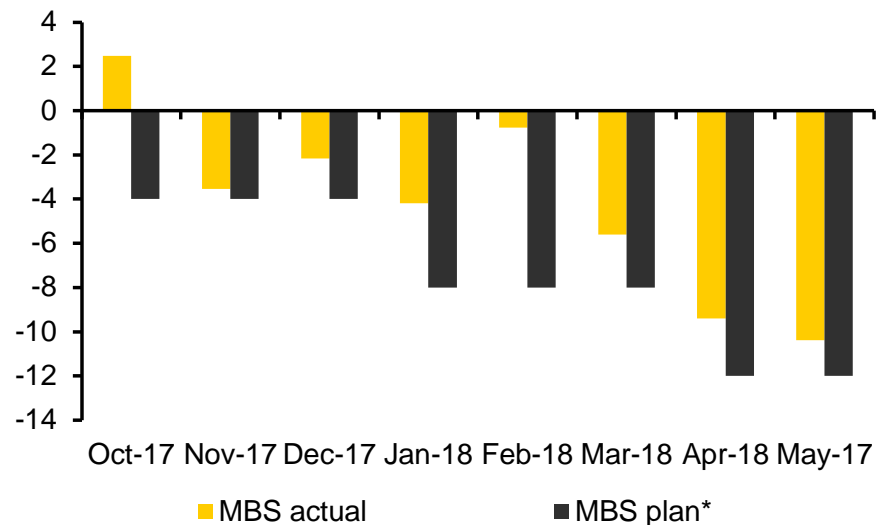
The Fed experience: volumes broadly on track

Reduction in Fed US Treasury and MBS portfolio, in \$ bn

US Treasuries



MBS

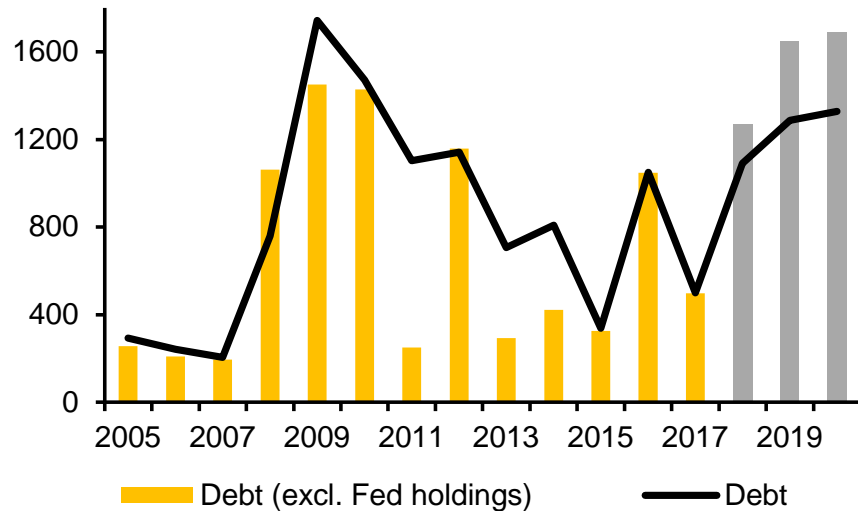


* According to NY Fed estimates
Source: NY Fed, Commerzbank Research

The Fed experience: deficit matters more than QE

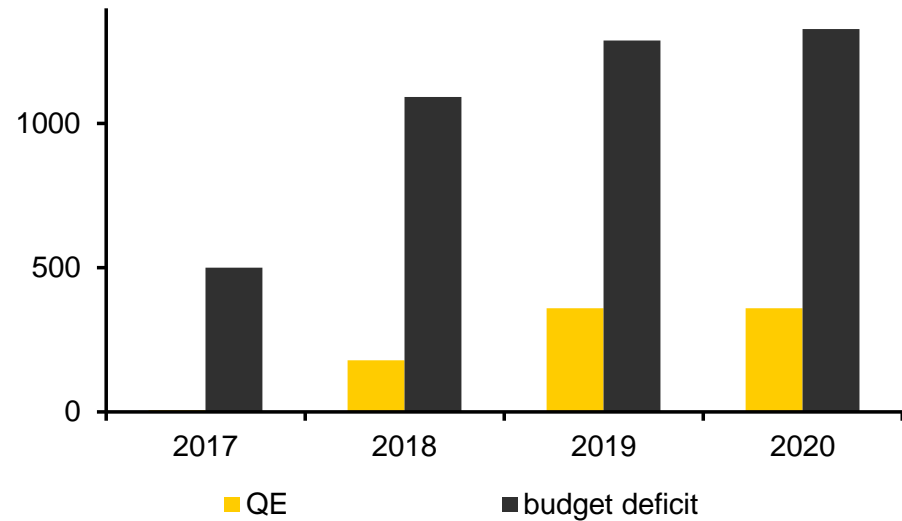
More public net issuance than during the crisis

Public debt, total and debt excluding Treasury securities held by the Fed, annual change (based on fiscal years), in \$bn. From 2018 Commerzbank forecasts



Budget deficit more than 3 times larger than reduction of Fed UST holdings

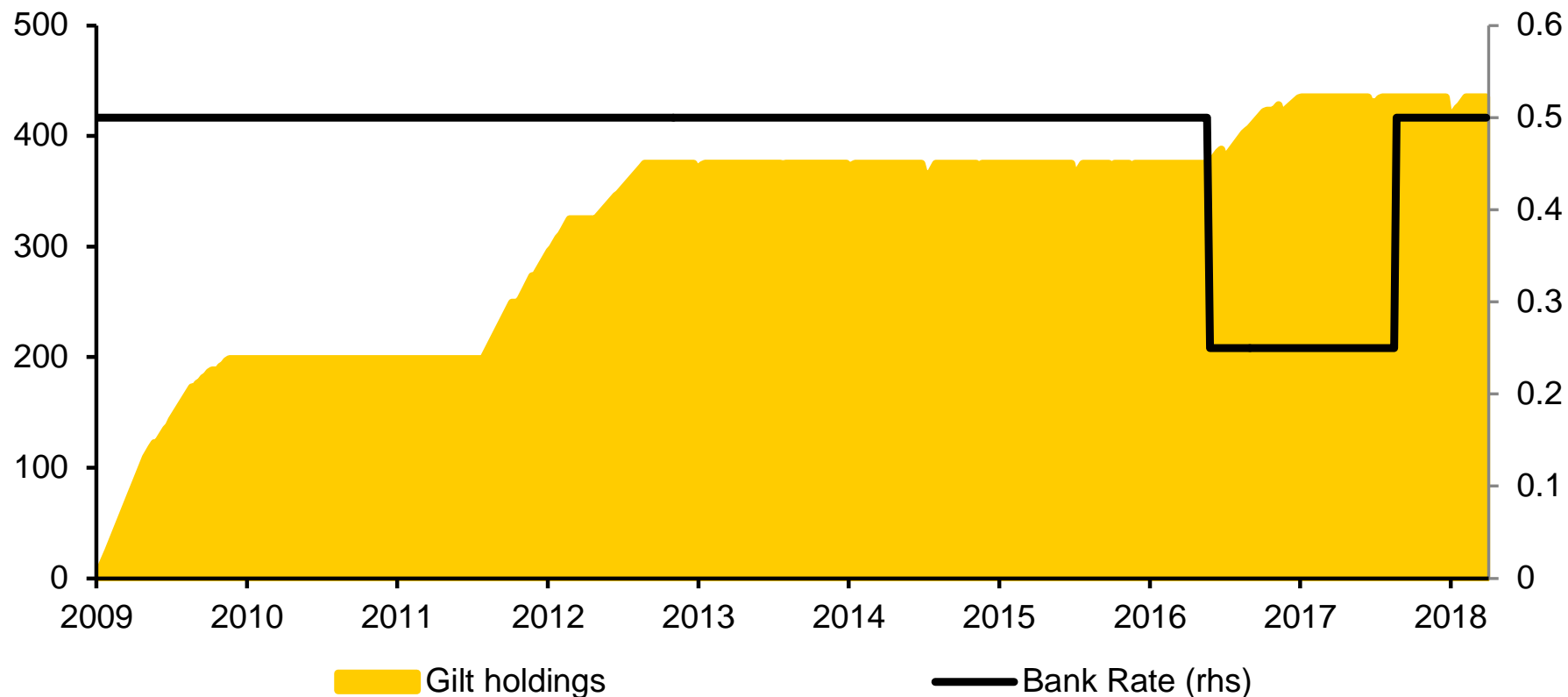
QE and budget contributions to change in US debt held by public, NY Fed projection and CBO estimates (based on fiscal years), in \$ bn.



Source: CBO, White House, NY Fed, Commerzbank Research

BoE: Rates have taken over from QE

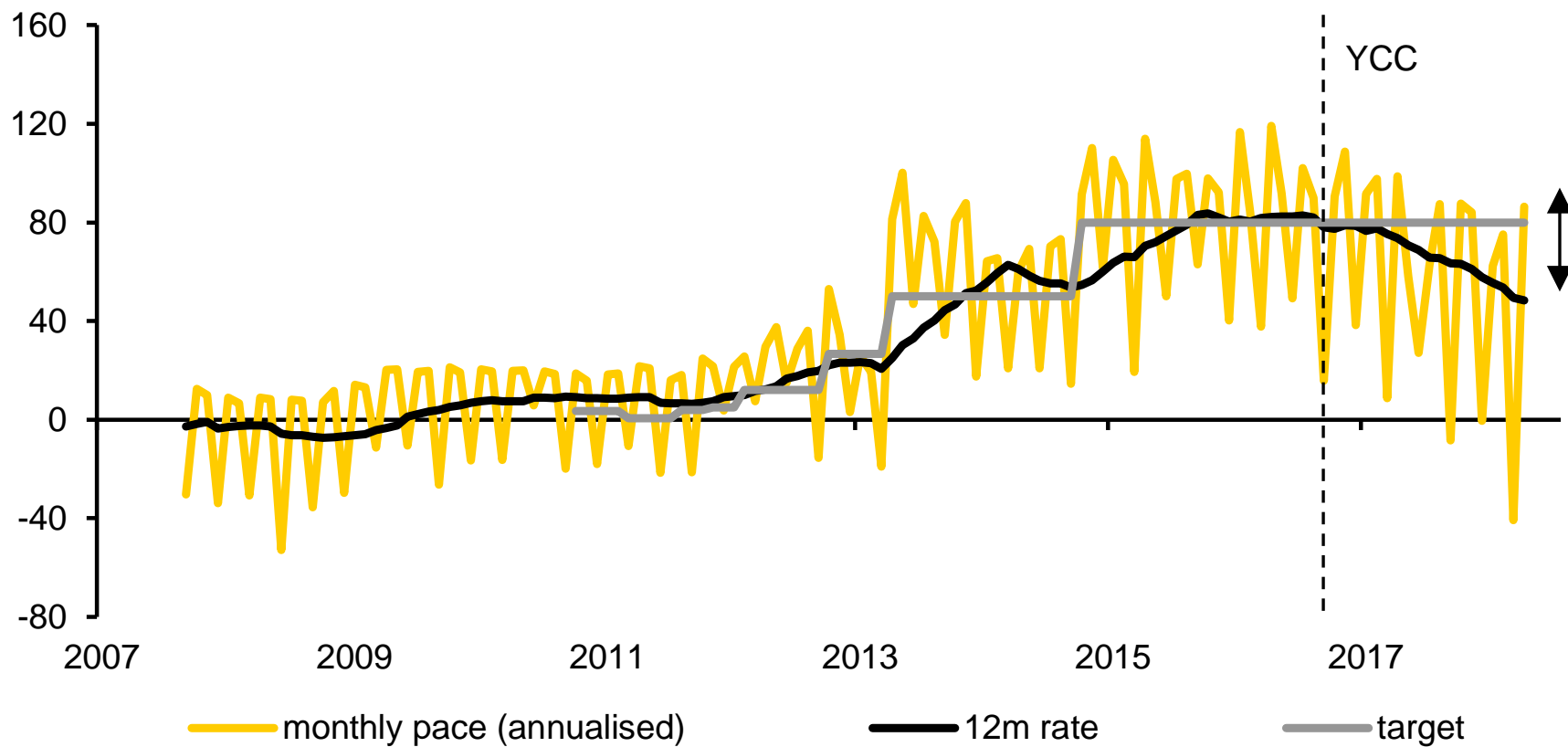
BoE QE portfolio, in £bn and Bank Rate, in %



Source: Bloomberg, BoE, Commerzbank Research

BoJ: More bang for the buck with YCC

Sovereign and MBS holdings by BoE, Fed, ECB and BoJ, quarterly data in \$ bn

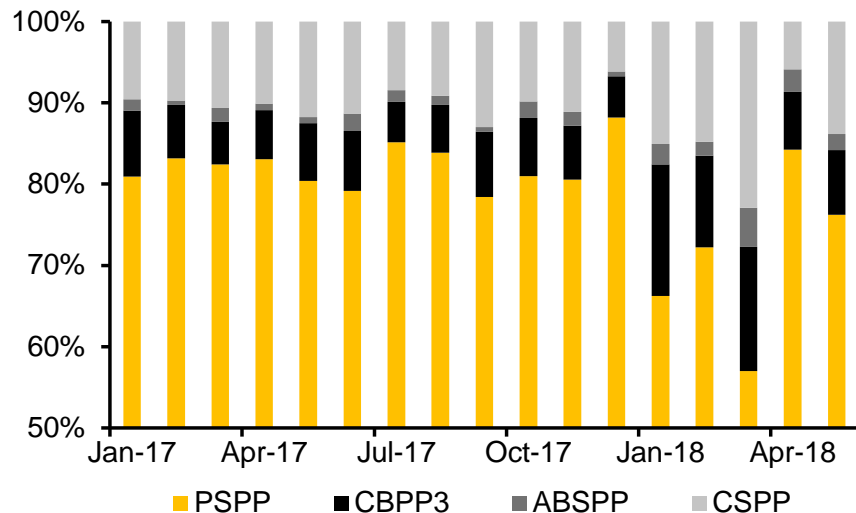


Source: BoJ, Commerzbank Research

ECB: Maxing out flexibility on the way to the exit

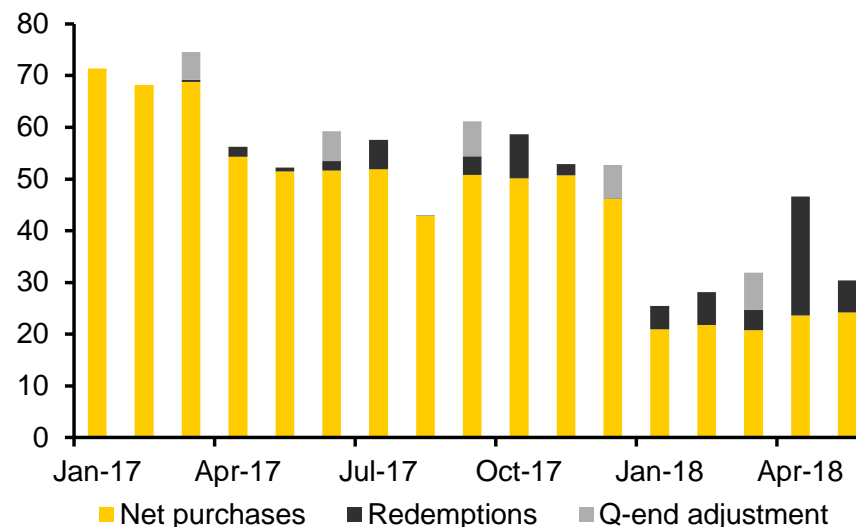
Private purchases prevail in Q1, but not thereafter

ECB asset purchases by programme, monthly change in portfolio size



Reinvestments gain in importance

Monthly gross PSPP purchases, in €bn



Source: ECB, Commerzbank Research

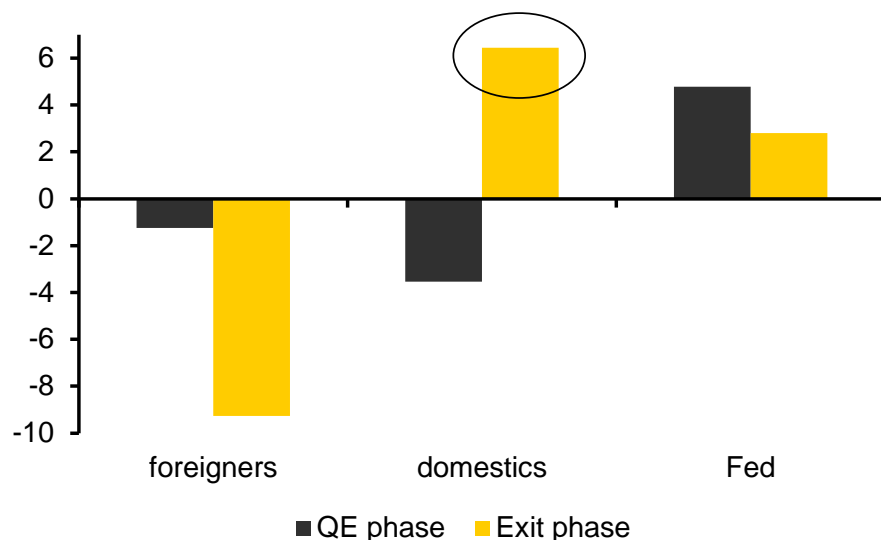


Achieving a post-QE equilibrium

US Treasuries: Domestic swing-factor

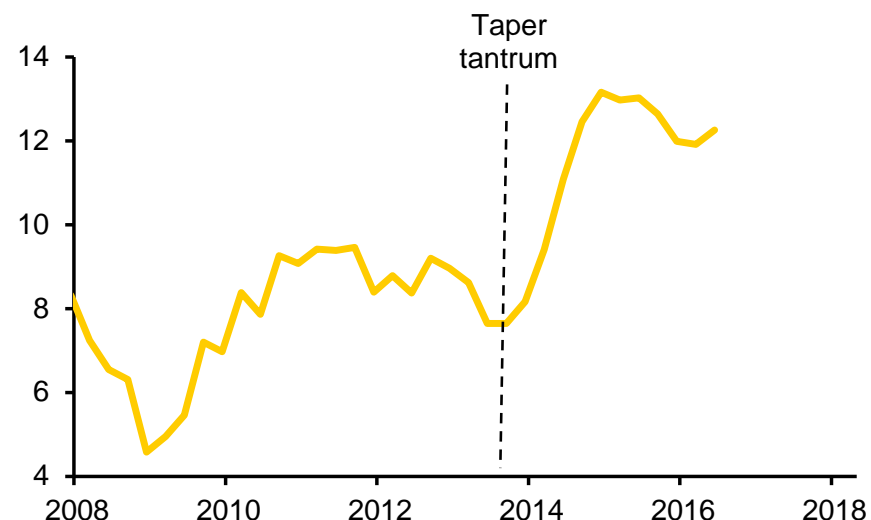
Fed was crowding out domestics, who return after tapering announcement...

Change in US Treasury holdings during QE and exit*, shares of total marketable debt, in percentage points



... with bank holdings rising disproportionately

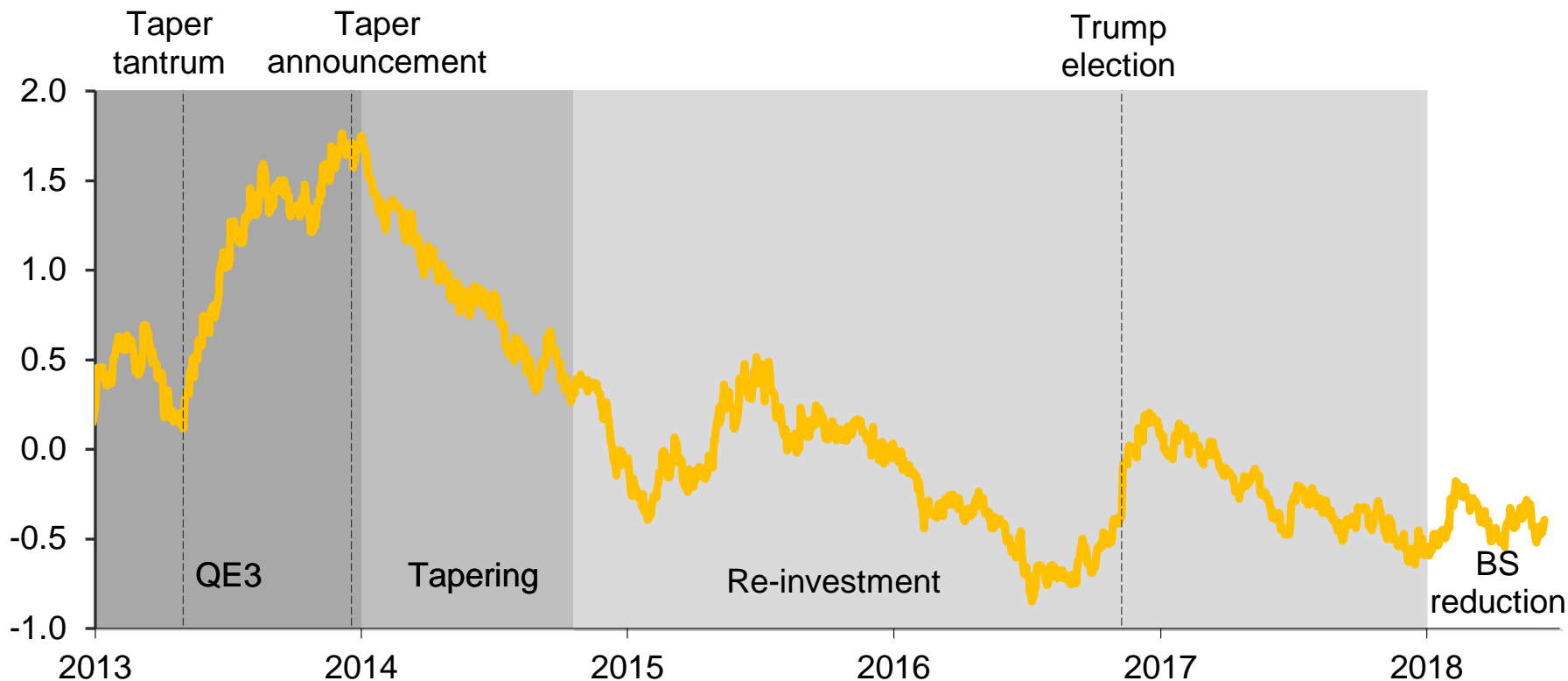
Share of US Treasuries held by depository institutions in percent of total marketable debt held by domestics



*QE phase is Q3-09 to Q1-13, exit phase Q2-13 to latest (Q1-18)
Source: US Treasury, St. Louis Fed, Commerzbank Research

US Treasuries: Words matter more than volumes

10y US Treasury term premium and Fed QE phases

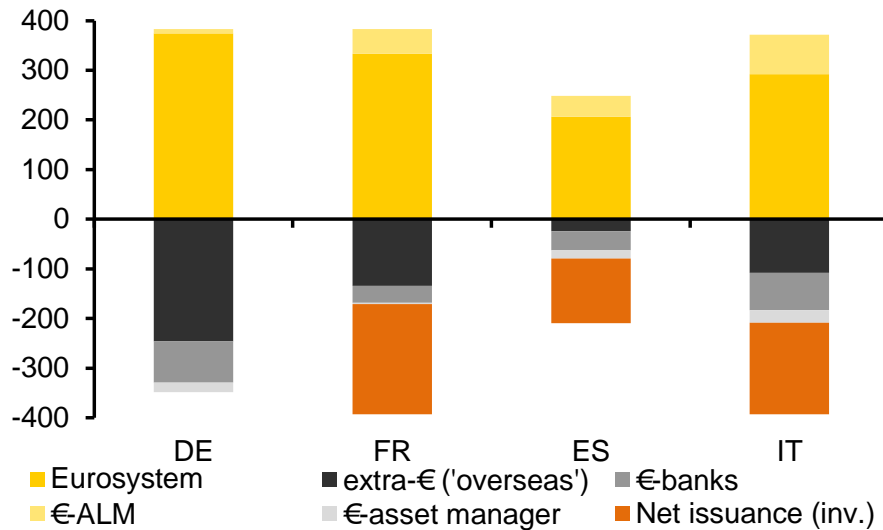


Source: Bloomberg, NY Fed, Commerzbank Research

Euro area sovereigns: Who buys, who sells?

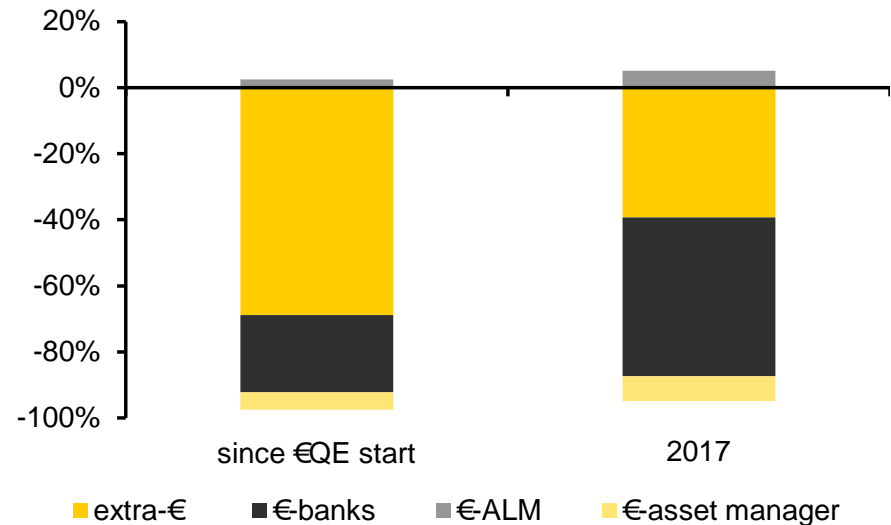
Foreigners have been the main source for the PSPP...

Net sovereign debt flows and net issuance since the start of €QE, in €bn as of Q4-17 (1y+ general government bonds)



... but this source is drying up!

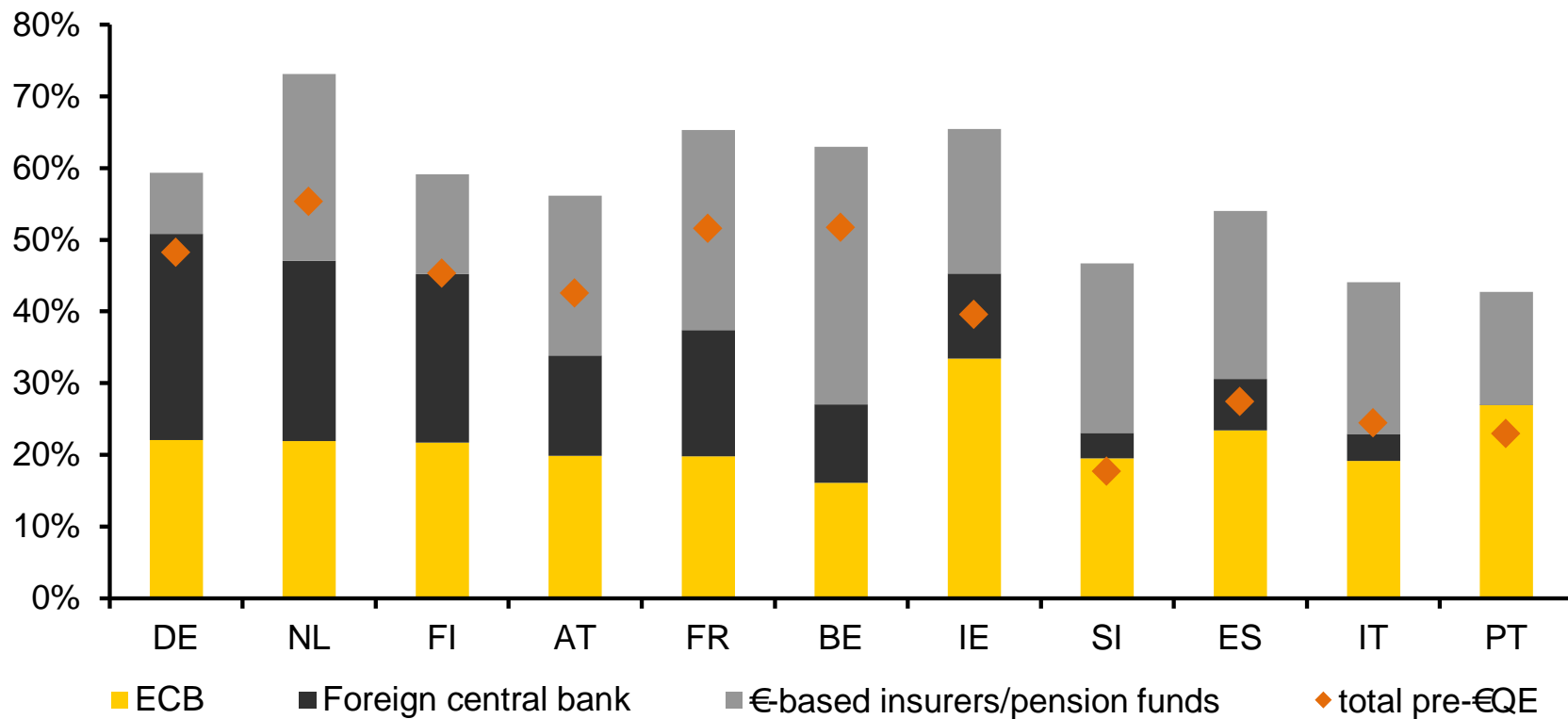
Estimated net Bund flows by investor type in % of PSPP Bund purchases and values in €bn (1y+ general government bonds)



Source: ECB, Eurostat, IMF, EIOPA, Commerzbank Research

Euro area sovereigns: Where are the sticky hands?

'Sticky holdings' defined as Eurosystem, €-based pension funds and insurers and foreign central banks, in % of outstanding 1y+ general government bonds



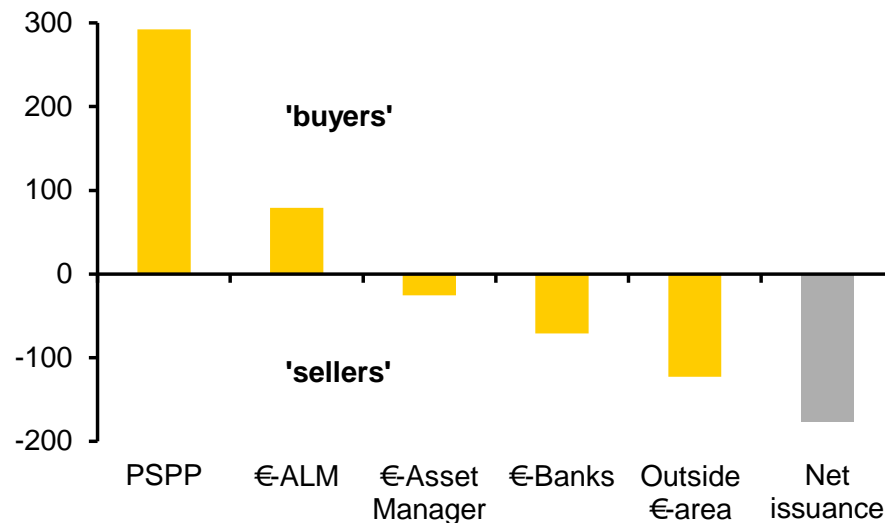
Source: ECB, Eurostat, IMF, World Bank, BIS, Commerzbank Research

Italy: Who will step in as marginal buyer of BTPs?

Share of foreign holdings of Italian debt, in %



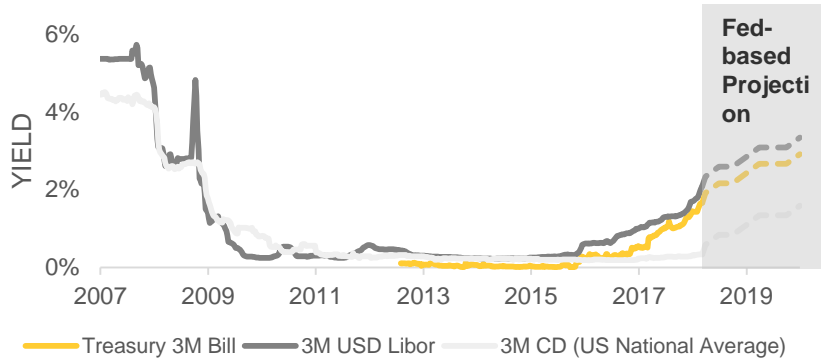
Italy net buying/selling and issuance since €QE, in €bn as of Q4-17



Source: ECB, Eurostat, IMF, World Bank, BIS, Commerzbank Research

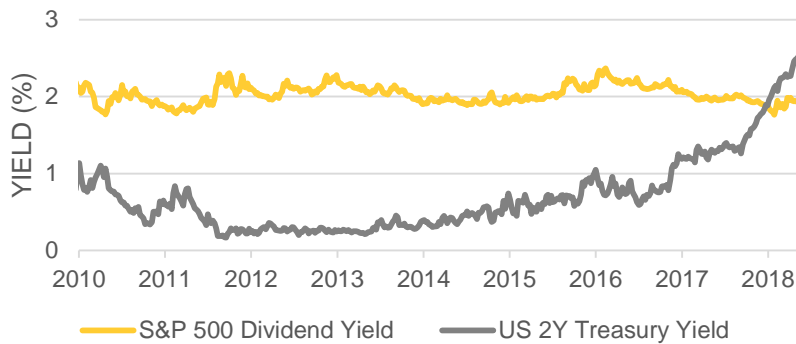
Confidence in US growth/inflation leads to short term rate rises

› Various short term interest rates on the upswing



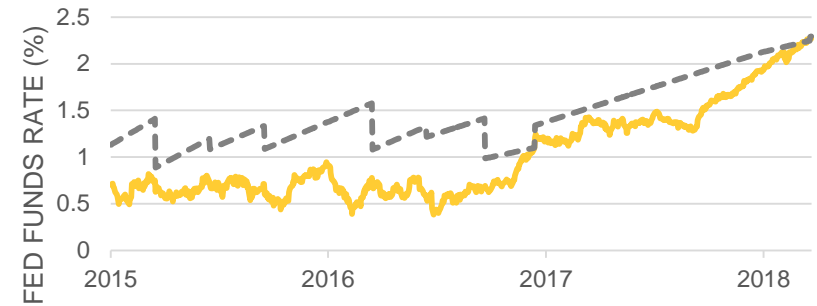
› Source: BlackRock Investment Institute, with data from Bloomberg and bankrate.com, March 2018.

› Safe fixed income now offers a viable and compelling portfolio alternative



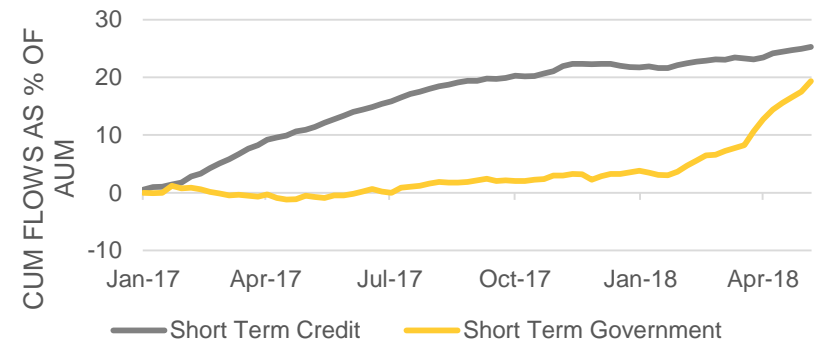
› Source: BlackRock Investment Institute, with data from Bloomberg, May 2018.

› The historical discount to Fed policy normalization path has narrowed



› Source: BlackRock Investment Institute, with data from JP Morgan DataQuery, March 2018. Notes: The chart shows the 12-month forward market-implied fed funds rate (using overnight index swaps) versus the 12-month forward path (interpolated) based on the Fed's median forecast in its Statement of Economic Projections.

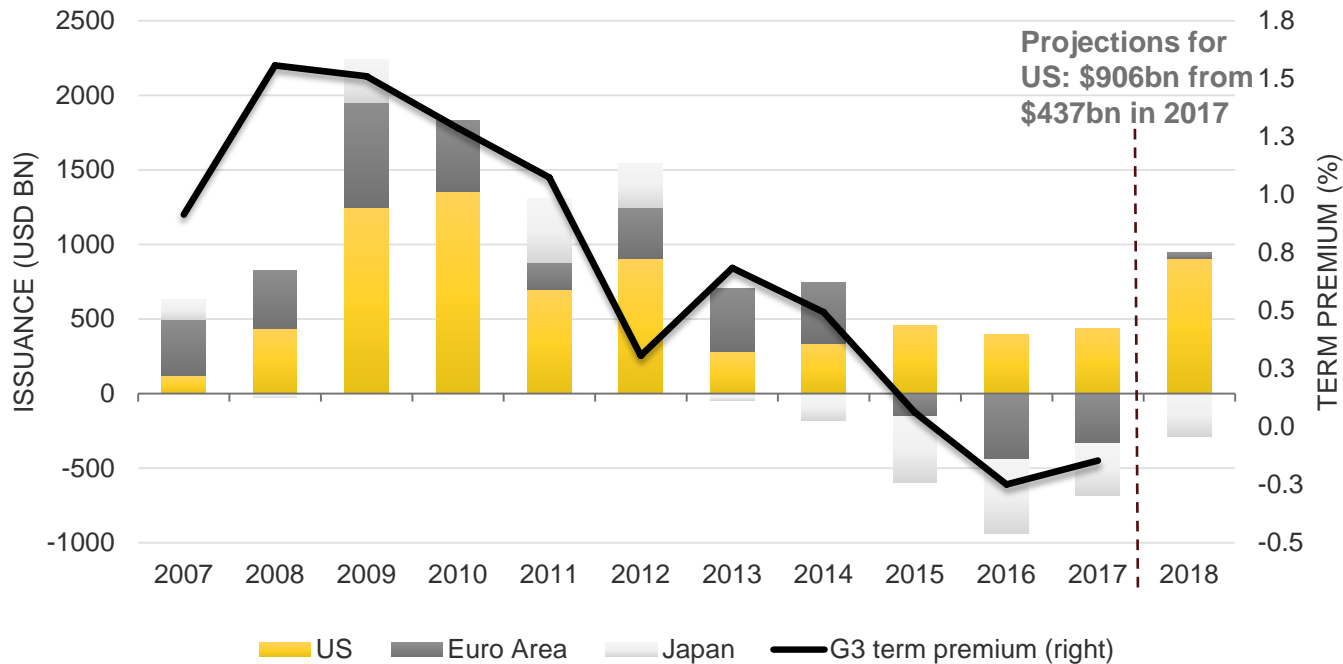
› We see flows now responding with significant inflows into US short end products



› Source: BlackRock Investment Institute, with data from EPFR, May 2018.

The impact on term premium

› Combination of QE normalization in the US, potential normalization by YE by ECB and uncertain outlook for BOJ policies alongside surge in issuance from US fiscal policy expansion have the potential to steepen the term premium after years of policy influences pushing the term premium lower



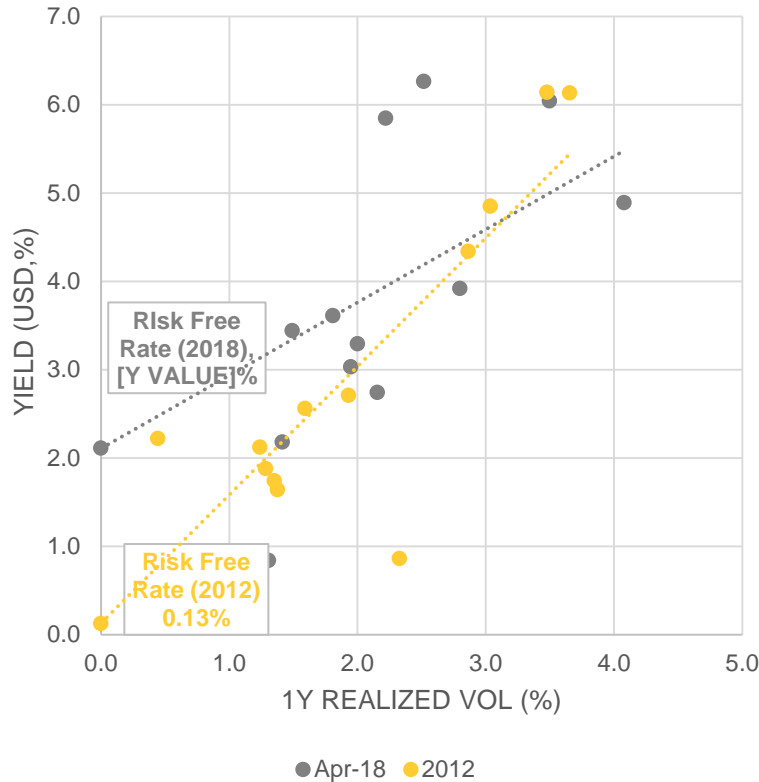
Sources: BlackRock Investment Institute, with data from Bloomberg and Morgan Stanley, February 2018.

Notes: The bars show net government bond issuance for the U.S., Eurozone and Japan, net of central bank purchases via quantitative easing programs.

Treasury yields can be decomposed into two components: expectations of the future path of short-term Treasury yields and the Treasury term premium. The term premium is the compensation that investors require for bearing the risk that short-term Treasury yields do not evolve as they expected. The term premium line represents the GDP-weighted average of G3 term premiums calculated based on model from New York Fed economists Tobias Adrian, Richard Crump, and Emanuel Moench (or "ACM"). The figures for 2018 are estimates. There is no guarantee that any forecasts made will come to pass.

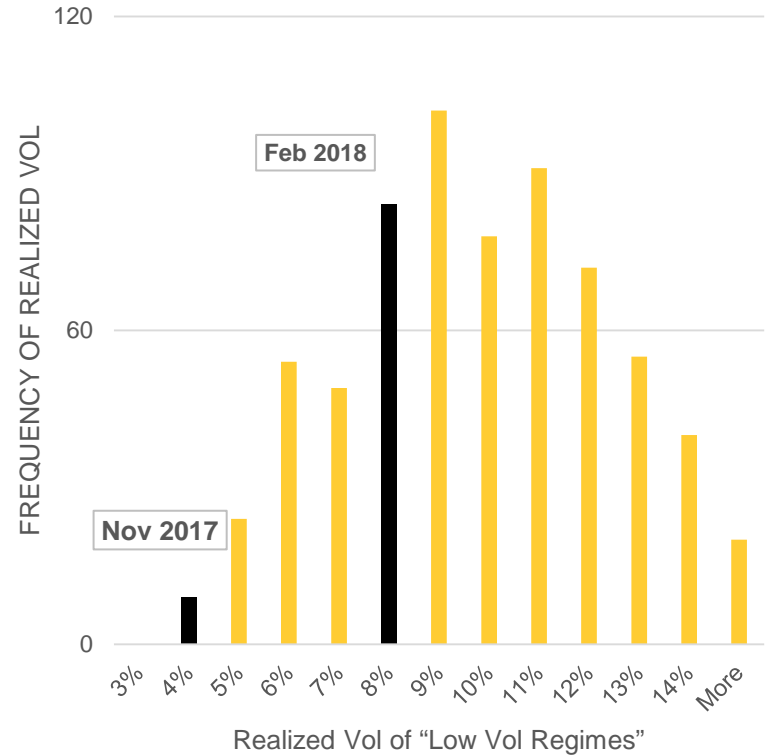
Cross asset implication – security market line viewpoint

- › Today the short end rate increases further flattened the SML of main FI asset classes – but this time through aggressive increases in the lowest risk areas of the fixed income market



- › Source: BlackRock Investment Institute, with data from Bloomberg, May 2018.
- › Notes: The chart shows current yield as well as realized volatility of main fixed income markets (using indices) as of April 30th, 2018 and Dec 28th, 2012. The market includes: US core fixed income; US govt debt, US IG and HY corp bonds, US MBS, EM \$ debt, EM local currency debt, Global Ex US core fixed income, Global IG and HY corporates. Risk free rate is proxied by 1Y US OIS.

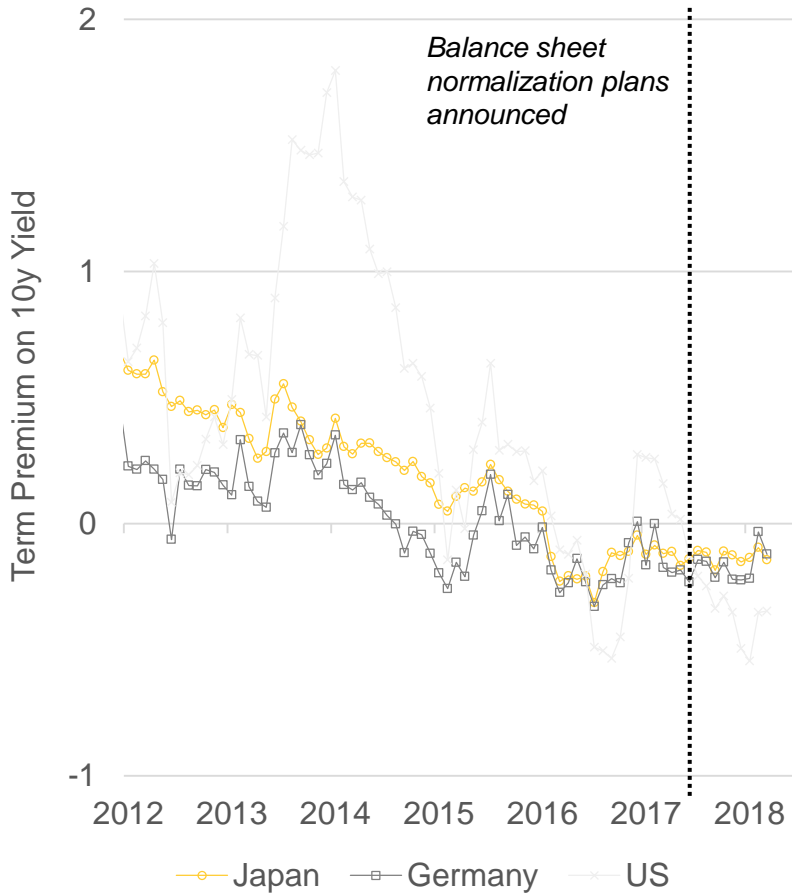
- › Higher realized risk levels in 2018 relative to 2017 historically aberrational low levels of volatility further pushed down the SML for riskier assets



- › Sources: BlackRock Investment Institute, with data from Robert Shiller, February 2018. Notes: realized equity volatility is calculated as the annualized standard deviation of monthly changes in US equities over a rolling 12-month period. Using a Markov-Switching regression model, we calculate three volatility regimes for both macro and equity market volatility: a high-volatility regime, a medium-volatility regime and a low-volatility regime. The lines plot the average level of volatility during each regime based on data from 1950 to 2017. The second chart is a histogram of the realized volatility. The histogram uses data from 1950 to 2017.

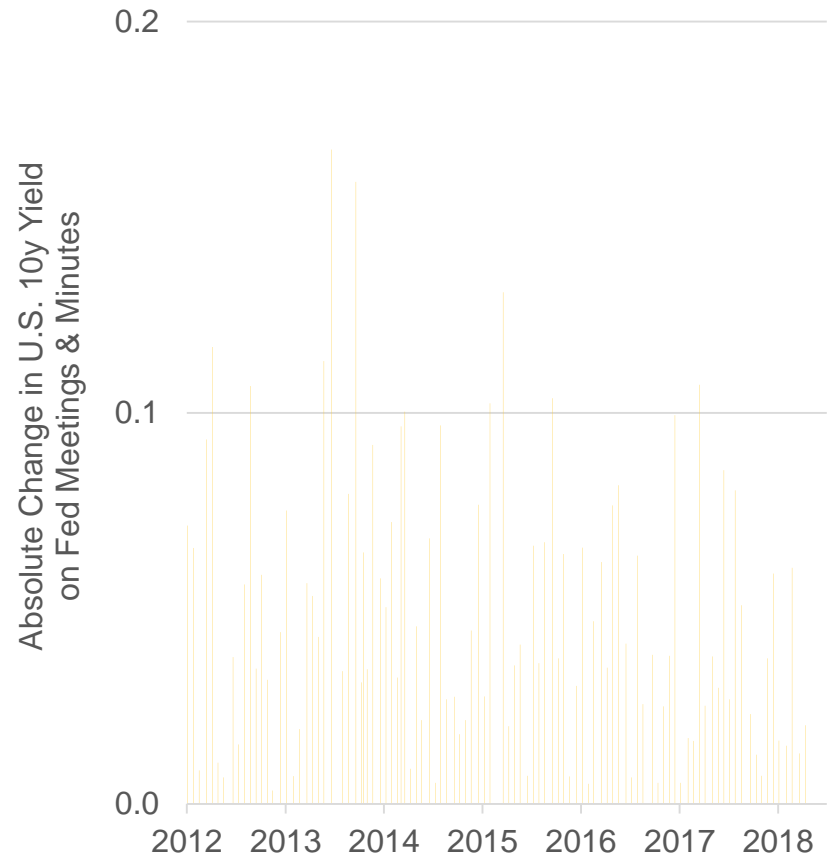
Bond markets have been well-behaved even in midst of reinvestment policy change

› Term premia have been well-behaved. The U.S. has not experienced a second taper tantrum



› Source: BlackRock Investment Institute, monthly data as of March 2018
 Note: This chart shows estimates of term premia on sovereign bonds based on a model similar to that of [Adrian, Crump & Moench \(2013\)](#).

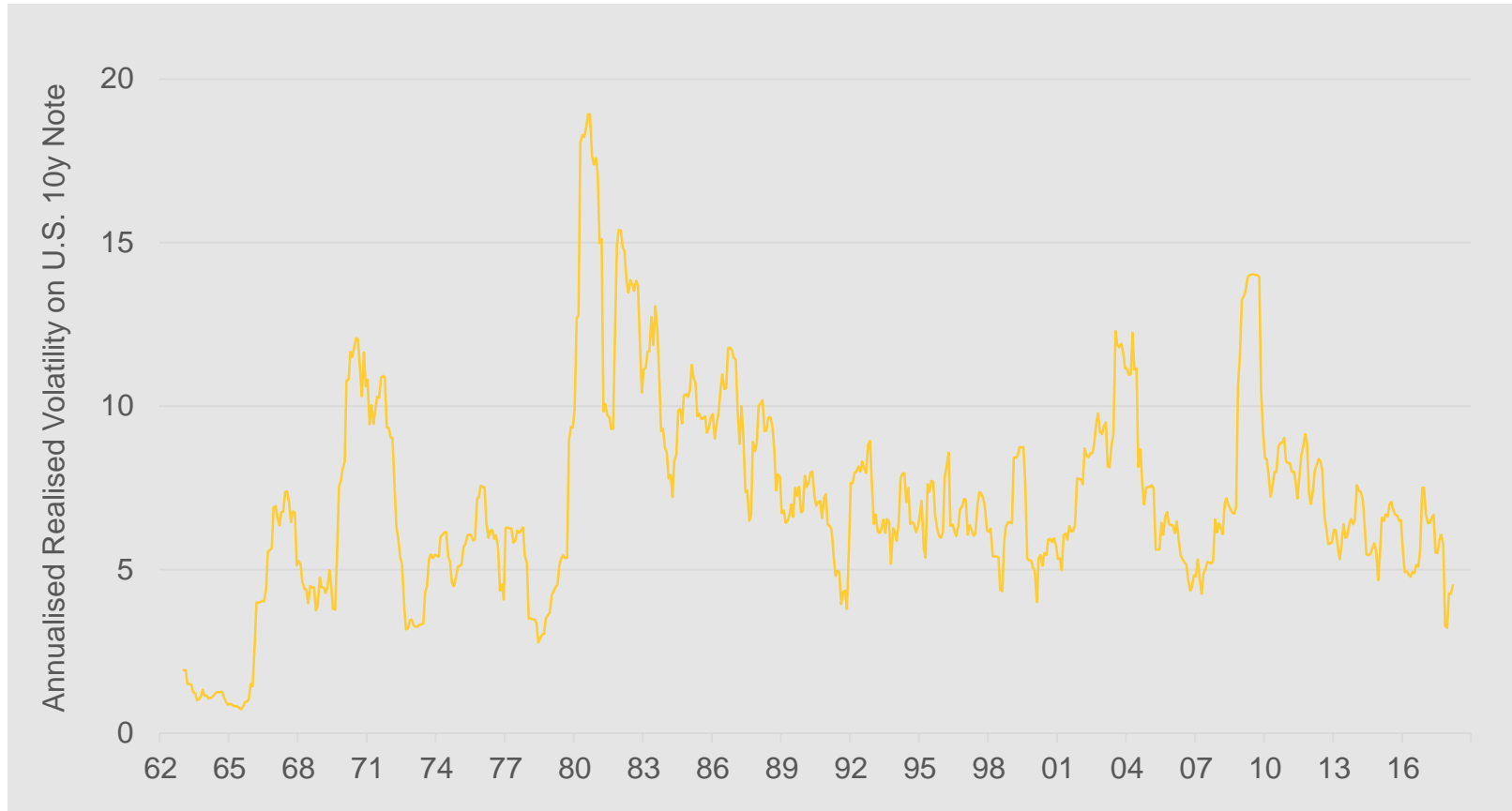
› Variability of Yield Changes on Fed announcement days has not increased significantly



› Source: BlackRock Investment Institute, using data from Bloomberg, as of April 2018
 Note: This chart shows the daily change in the U.S. Treasury 10yr yield on days when FOMC meetings have concluded and when meeting Minutes have been released.

Bond market volatility has been steady

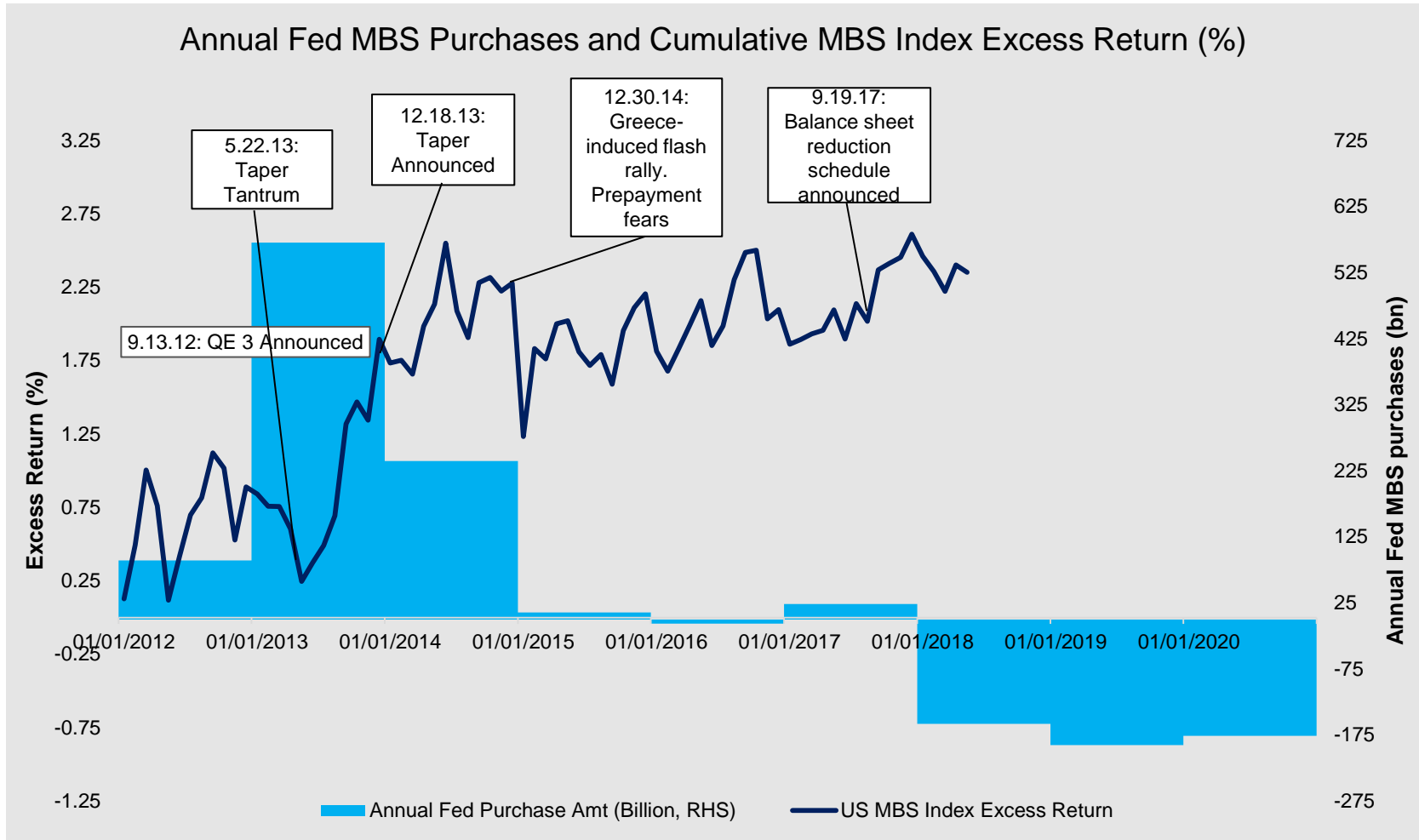
› Realised volatility on U.S. Treasury 10yr note



Source: BlackRock Investment Institute, using data from Haver Analytics, monthly data, latest point March 2018

Note: This chart shows annualised 12-month standard deviation of monthly total returns on a constant maturity 10yr U.S. Treasury note as calculated by Haver Analytics.

FED MBS taper experience



FED MBS taper experience

The investor bases within mortgages and their annual purchases

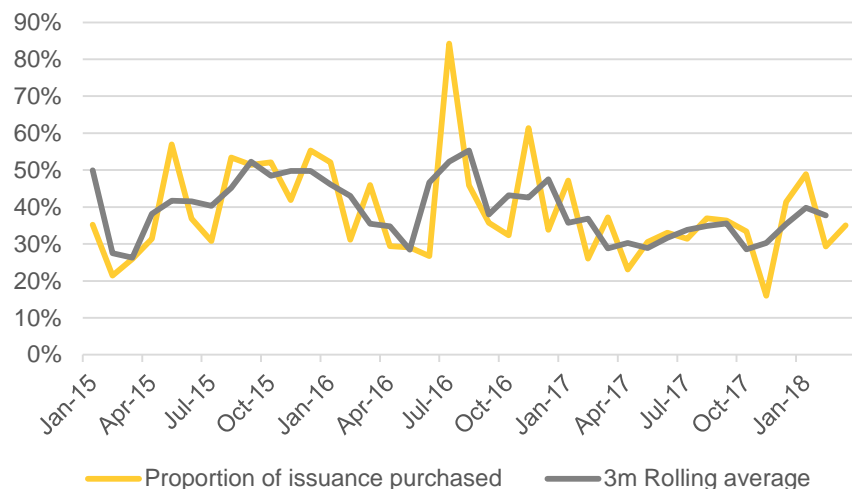
	Historical Change									Estimated Holdings (Dec-2017)	Projected 2018
	2009	2010	2011	2012	2013	2014	2015	2016	2017		
Gross supply	1,696	1,349	1,142	1,661	1,546	925	1,250	1,472	1,290	6,274	1,320
Net Supply	496	-122	6	65	147	84	162	252	300		320
GSEs	-56	-121	-91	-85	-83	-46	-42	-43	-2	191	12
FHLB	8	4	-1	-	-19	-2	-12	-8	-9	56	-
Federal Reserve	910	92	-154	93	556	241	15	0	11	1,765	-168
Treasury	131	-47	-118	-26	-	-	-	-	-	-	-
Banks	109	105	161	94	-46	39	151	120	141	1,819	150
Foreign*	-20	-39	1	6	-53	44	30	107	60	908	110
REITs	16	38	105	109	-88	9	-50	-18	40	250	35
Others (M-mgrs, HFs, Insurance Companies, Dealers)	-601	-154	103	-126	-120	-200	70	94	59	1,286	181
MBS excess return (bps)	495	225	-106	91	98	40	-5	-11	36		

Excess returns for spread sectors over 4 different regimes

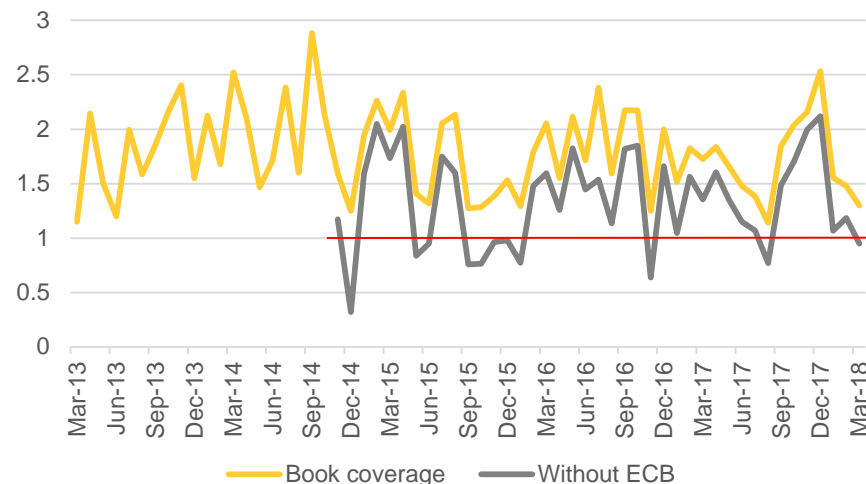
	Barclays Index Excess Returns		
	MBS	CMBS	IG Credit
QE 3 (Pre-Taper)	1.90	9.03	8.93
QE 3 (Taper)	0.38	1.05	(0.17)
Reinv Period	0.14	3.32	5.32
Reinv Taper	(0.06)	0.30	(0.65)

ECB Activity in Covered Bond Primary Market

› ECB purchases as % amount issued



› Book coverage pre and post



- Arguably the Euro covered bond market has been the market most impacted by the ECB's activities with the current programme the third of it's kind
- The real money participation has been squeezed by very rich valuations and as the ECB looks towards policy normalisation the question is whether the investor base is there to accommodate a reduction in ECB participation
- While the 3m rolling average of participation has declined from 2016 highs it has rarely dipped below 30%

- There have been multiple periods across the last 3Y where transactions would not have printed without purchase programme involvement
- Assuming an average participation of 30%, over the period of the programme 41 transactions would have failed without the purchase programme or 12 transactions of 125 in the last year.



Communication challenges

Blackrock ECB Survey among 11 sell side research and trading desks

Regarding the net Asset Purchase Program (APP):

- 1) 72% of survey participants **expect the taper decision to be announced in July** while 28% expect June;
- 2) 90% of the survey participants expect the **ECB net APP to finish by December** this year with 10% expecting March 2019;
- 3) 45% of the survey participants expect **ECB to purchase at 15bn a month in Q4 this year** and 27% expect a schedule of 30/20/10bn for Q4. The other proposed schedule was 20/10/0 or 15/10/5 for Q4;
- 4) 82% of survey participants **expect ECB to announce a clear end date of the net APP** while 18% of participants expect a more open-ended approach that allows flexibility.

Regarding rate hikes:

- 1) **80% of survey participants expect the ECB to first hike rates in the middle of 2019** (either June or July), while 20% of participants expect September;
- 2) **45% of participants expect the first rate hike to be of 20bps**, 35% expect 15bps, 10% expect 10bps and 10% expect 25bps;
- 3) Regarding forward guidance, some participants expect **ECB to clarify “well past” at the time of tapering and to potentially reaffirm the pricing of the forward curve in order to anchor expectations.**



Timing of the QE exit announcement was a surprise, timing of the QE exit was not!

Words weigh more than volumes!

ECB Board member Cœuré on QE:

“At the end of last year I said that I didn’t expect that our asset purchase programme would need to be extended again. I see no reason to change my view.”

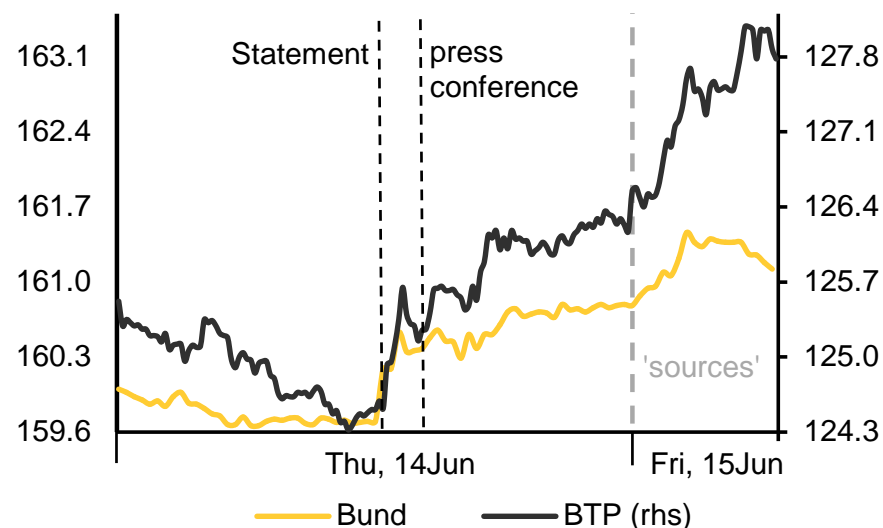
(24 May 2018)

ECB Forward Guidance on rates:

The Governing Council expects the key ECB interest rates to remain at their present levels at least through the summer of 2019.”


(ECB statement, 14 June 2018)

Bund and BTP future around the June ECB meeting



Source: ECB, Bloomberg, Commerzbank Research

Points for discussion

- › Should the ECB explicitly keep the option of maintaining private sector programmes to prevent an unwarranted tightening of credit conditions?
- › Should the ECB be more open about the flexibility to shift APP reinvestments between programmes?
- › How large are the bond market risks from TLTRO redemptions?
- › Can the ‘Draghi put’ be maintained when Draghi leaves?
- › Should the fact that EGBs are not risk free despite large APP holdings be seen as failure in a broader sense that will come to haunt us later? 

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I) Recommendations versus benchmarks:

Overweight (OW) We expect outperformance versus the benchmark in spread and/or total return terms
Marketweight (MW) We expect performance in line with the benchmark in spread and/or total return terms
Underweight (UW) We expect underperformance versus the benchmark in spread and/or total return terms

Benchmark: Unless stated otherwise, the benchmark is the iBoxx € Corporate for IG-rated names/instruments, and the iBoxx € High Yield core cum crossover LC for HY-rated names/instruments

II) Outright recommendations:

Buy We suggest entering / expanding positions in the relevant names/instruments
Sell We suggest reducing / closing positions in the relevant names/instruments

Time Horizon: Unless stated otherwise, the time horizon for our recommendations is three months.

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Marketweight	40%	26%
Underweight	28%	38%

Source: Commerzbank Research

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