

Authors: Florian Späte / Martin Wolburg

- At its July meeting, the ECB reiterated its message that QE will end in December 2018. While the escalation of the trade conflict with the US is a major risk, the hurdles for postponing the exit from QE look very high.
- With the ECB conducting only reinvestments, its gross asset purchases will likely fall from € 465 bn in 2018 to € 165 bn in 2019. Details on the future reinvestment activity will probably be provided only at the September 13 meeting.
- In order to sustain a strong impact on financing costs, focusing reinvestments on long-dated securities is a policy tool discussed. It faces operational challenges and will not be able to prevent the PSPP portfolio from losing maturity.
- Nevertheless, we look for only a moderate upwards effect from the end of QE on government bond yields as the stock of QE still provides a cushion.

Following the announcement of QE in December 2014, at its policy meeting inJune the ECB prepared markets that it will end its Asset Purchase Program (APP) in December 2018. At the same time it announced that it "intends to maintain its policy of reinvesting the principal payments from maturing securities purchased under the APP for an extended period of time" after the end of QE.

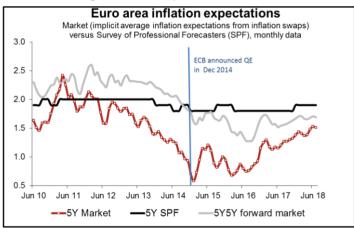
However, there are speculations whether the ECB will really end QE in 2018. Macro data in the euro area disappointed as of late and there are concerns that bond markets might overreact once the ECB actually terminates QE. Moreover, with the ECB only doing reinvestments a major question for bond markets is how these purchases will be conducted. According to rumours, measures to maintain or extend the maturity of the ECB's policy portfolio are being discussed within the ECB.

In what follows, we assess the robustness of the ECB's end of QE, shed some light on the reinvestment flows for 2019, discuss the ability of the ECB to steer the maturity of its portfolio in the post QE world and draw market implications.

End of QE despite increased growth risks

At its June meeting the ECB had announced that it would reduce the amount of monthly APP purchases from € 30 bn to € 15 bn after September and let them end in December. However, this anticipation of the Governing Council was explicity made "subject to incoming data confirming the Governing Council's medium-term inflation outlook." Over the past months euro area macro data surprised on the weak side, Q2 GDP decelerated to just 0.3%

qoq (the weakest since Q2/2016) while risks shifted more to the downside and are primarily related to external factors, something the ECB emphasized.



At the July press conference, President Draghi assessed that there has not been much of a change to the overall June macro outlook (with the expectation of GDP growth at 2.1% in 2018 and 1.9% in 2019). From the ECB's point of view the risks surrounding the growth outlook "can still be assessed as broadly balanced". By adding the word "still" the ECB acknowledges that the overall risk abalance has deteriorated. The risk arising from protectionism remains "prominent". Given some easing of US-EU trade tensions and solid domestic activity, we expect quarterly growth to not fall below potential over the coming quarters. Accordingly, we see the uptrend in underlying inflation to

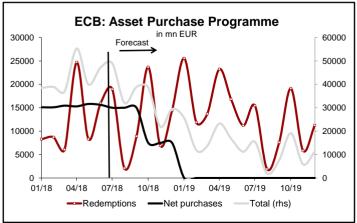
stay in place. In July, headline inflation rose to 2.1% yoy, mainly on the back of energy prices but also due to a recovery of core inflation (ex energy and fresh food) to 1.3% yoy. Various measures of inflation expectations have markedly improved. For instance, the expected average market implied inflation rate for the coming 5-years is about 1 pp above the level at the time when QE was announced and in the Survey of Professional Forecasters the perceived risk of deflation has fallen to almost zero.

QE, which was launched in order to eliminate exactly the deflation risk, is hence not needed any longer. It would need a broader trade war with ultimately deflationary tendencies to emerge again, to have the ECB considering a surprising extension or increase of net asset purchases. Potential growth disappointments would be handled primarily by means of the key rate path. Hence, following four years of QE, 2019 will likely be the first year without ECB net asset purchases.

ECB reinvestment policy comes into focus

With net asset purchases ending, one pillar of the ECB's current key policy instruments (key rates, forward guidance, QE and reinvestment of maturing APP purchases) will be removed. Hence, the only direct policy impact on bond markets will then be via reinvestments. We estimate that the volume of gross APP purchases will fall from € 465 bn in 2018 to € 165 bn in 2019. This is of special importance for the government bond market. The stock of Public Sector Purchase Program (PSPP) purchases is 84% of the all APP purchases while 7% in case of the Corporate Sector Purchase Program (CSPP). Only around 3% of all corporate bonds held under the CSPP will mature next year (around € 400mn/ month). In contrast, this share is well above 6% in case of the PSPP, implying that the ECB will have to reinvest € 132 bn (i.e. more than € 11bn each month) from maturing government bonds in 2019.

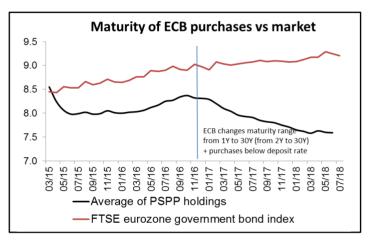
In order to sustain an as strong as possible downward effect on longer term financing costs, the ECB could tweak its reinvestments. According to a Reuters news from June 29, the ECB is discussing to invest cash from maturing bonds next year only in bonds with a maturity of at least ten years. Fine tuning the maturity of assets is nothing unprecedented. In 1961, the Fed sold short-term T-bills and replaced them with longer-dated government bonds. In the period between September 2011 and December 2012, the Fed replaced US\$ 667 bn in securities with maturities below three years with longer-dated assets. However, the idea discussed within the ECB is much less ambitious than the Fed's latest 'Operation Twist'.



Maturity of PSPP portfolio to fall

The effect of longer-dated bond buying on demand is only one part of the story. Theoretically more important is the impact on maturity. Generally, by withdrawing long-term bonds from the market when doing QE, a part of the duration risk that would otherwise have to be born by the market is shifted to the central bank so that the term premium and hence yields decline. Maintaining a high maturity would therefore ensure that the term premium and yields for longer-dated bonds stay low. This is of special importance on the government bond market.

The maturity of the PSPP purchases was below the market average. It even declined further when the ECB decided in December 2016 to extend the universe of eligible assets by lowering the lower maturity bound from two to one year and to allow purchases of papers with yields below the deposit rate (see graph).



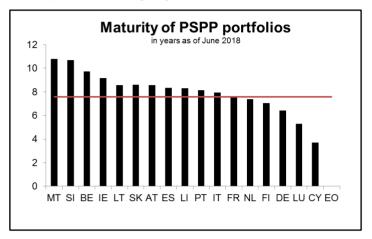
Maintaining or even increasing the maturity of the QE stock by means of reinvestments only is not an easy task. As the portfolio ages inevitably, it depends on the volume of monthly purchases and of the maturities bought whether the maturity decay can be offset.

Given our estimated 2019 reinvestment volume and that the PSPP stock will likely be at € 2180 at year-end 2018, 6% of the portfolio will have to be reinvested. In order to maintain the current maturity of 7.6 years, all reinvestments would have to be done in the 18Y segment thereby more than doubling the maturity of past purchases. Making assessments beyond the 1Y horizon is extremely hard as the ECB only published the redemptions for the coming twelve months and does not provide any clue about the distribution of the maturities within the PSPP portfolio. However, ECB's Praet stated that operation twist "is generally not strong enough to maintain the average maturity ... at a level consistent with a given amount of accommodation".

Moreover, the maturity of PSPP stocks widely varies among sovereigns. On average, papers from core countries (e.g. DE, FI, NL) have a lower maturity than peripheral economies (IE, ES, PT, IT). As a result, reinvestment flows will be dominated by core economies in the coming years with Germany outstanding in terms of size. According to estimates, in 2019 up to € 50 bn of the debt that needs to be rolled over is German. Here, the issuer limit stands against a meaningful maturity increase of reinvestments: In core countries the issuer limit is almost reached (DE, NL) while net supply will be negative in 2019 given

budget surpluses. Generally, peripheral markets have more leeway (with PT as an exception).

Therefore, conducting a sort of 'naive operation twist' by merely extending the maturity of existing stocks of govies for all sovereigns without violating the capital key premise would not be feasible. However, there is news that the supply of ultra-long govies will increase: Slovakia and a German state (Northrhine Westphalia) have sold 50-year bonds for the first time while Austria tapped its ultra-long bonds. Belgium plans to sell 40Y and 50Y bonds. This could help in the medium term but will not prevent the PSPP portfolio from ageing.



Huge stock of QE to prevent a taper tantrum

With the normalization of monetary policy ahead, there is potential for disruptive market movements. In 2013, the Fed's public thinking about an end of QE led to sharply rising Treasury yields. Regarding the euro area we deem such a development much less unlikely. First, at the time of the US taper tantrum private investors held about half of marketable US Treasuries but this share is currently less than 10% in case of Bunds according to ECB's Coeré. Second, even given the maturing of the ECB's PSPP stock, this stock will still be large enough to exert a significant downward pressure on yields. Our own calculations suggest that this stock will in 2019 continue to reduce 10-year Bund yields by about 60 bps and that the stop of net asset purchases will contribute to an increase of yields by around 10 bps only.

How the ECB reinvestment scheme could look

Neither at the June nor at the July ECB policy meeting the reinvestment issue had been formally discussed. But we expect this discussion to finally start at the September 13 meeting. Given above considerations, the ECB still has leeway to fine tune its policy stance by means of reinvestments.

In order to slow maturity decay as much as possible, the ECB could also decide to invest above the 30Y maturity bucket. While capital key buying will remain in place, temporary deviations from this benchmark also with regard to the stock of PSPP purchases will have to be tolerated given the dominance of German reinvestments next year.

Such deviations would not jeopardize the ECB's credibility concerning capital keys if they would be related to a period over which the ECB at least maintains its APP stock constant. Forward guidance with respect to the reinvestment period (e.g. 2 years after ending QE) would also provide some cushion to the market regarding the duration risk.

According to ECB estimates the term premium on 10-year APP holdings varies from 85 bps (no reinvestments) to 110 bps (4Y reinvestments) in 2018.

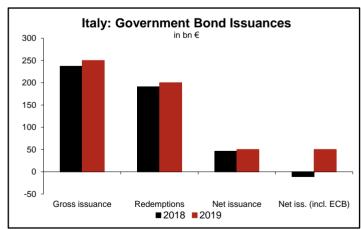
The ECB could also shift the proceeds from government bonds into corporate bonds where no capital rules exist and where the issuer limit is 70%. However, corporates are riskier than govies and generally with shorter duration so that there would be less cushion for the sovereign debt market. Pragmatically, the ECB could generally announce that it will be flexible to switch between corporate and government bond reinvestments.

Bond market implications

The contained impact of the end of QE on bond markets is in line with our view of an orderly rise in yields. We expect 10Y Bund yields to rise to 0.90% in 12M with other factors like higher underlying inflation, an increase of net issuance (from below € 100 bn in 2018 to around € 120 bn in 2019) and higher US yields being altogether more important than the mere stop of QE. With Bunds maintaining a high QE premium, the Bund-swap spread will remain wide. Even if the ECB increasingly invests into longer maturities, we are not concerned about a flattening of the yield curve as the ECB will very likely stick to its forward guidance thereby anchoring short term yields.

Fiscal policy plans suggest that 2019 net supply will increase for peripherals but not for Bunds. As the ECB will stick to capital key buying for reinvestments supply works at the detriment of peripherals, favoring a higher peripheral-Bund spread. Moreover, there is more 'freefloat' in peripheral debt than in Bunds so that the sensitivity to markets is higher.

A key concern is that Italy may clash with the EU over the 2019 budget in autumn potentially triggering renewed market jitters on the BTP market. However, we think that the pure technical picture is looks somewhat reassuring. Domestic owners and the ECB hold around two thirds of redeeming Italian bonds. With the ECB to purchase circa €15 bn of Italian debt until the end of 2018, this leaves € 45 bn to be funded. An increase in short-dated BOTs and deploying some of the Treasury's cash balance should be sufficient near-term.



Imprint

Head of Research Vincent Chaigneau (vincent.chaigneau@generali-invest.com)

Head of Macro & Market Research: Dr. Thomas Hempell, CFA (thomas.hempell@generali-invest.com)

Team: Luca Colussa, CFA (luca.colussa@generali-invest.com)

Radomír Jáč (radomir.jac@generali.com)
Jakub Krátký (jakub.kratky@generali.com)

Michele Morganti (michele.morganti@generali-invest.com) Vladimir Oleinikov, CFA (vladimir.oleinikov@generali-invest.com)

Dr. Martin Pohl (martin.pohl@generali.com)

Dr. Thorsten Runde (thorsten.runde@generali-invest.com)

Dr. Christoph Siepmann (christoph.siepmann@generali-invest.com)

Dr. Florian Späte, CIIA (florian.spaete@generali-invest.com)
Dr. Martin Wolburg, CIIA (martin.wolburg@generali-invest.com)

Paolo Zanghieri, PhD (paolo.zanghieri@generali.com)

Issued by: Generali Investments Europe Research Department

Cologne, Germany · Trieste, Italy Tunisstraße 19-23, D-50667 Cologne

Sources for charts and tables: Thomson Reuters Datastream, Bloomberg, own calculations

In Italy: In France: In Germany:

Generali Investments Europe Generali Investments Europe Generali Investments Europe

S.p.A Società di gestione del risparmio S.p.A Società di gestione del risparmio S.p.A. Società di gestione del risparmio

Corso Italia, 6 2, Rue Pillet-Will Tunisstraße 19-23 20122 Milano MI, Italy 75009 Paris Cedex 09, France 50667 Cologne, Germany

Via Niccolò Machiavelli, 4 34132 Trieste TS, Italy

www.generali-invest.com

This document is based on information and opinions which Generali Investments Europe S.p.A. Società di gestione del risparmio considers as reliable. However, no representation or warranty, expressed or implied, is made that such information or opinions are accurate or complete. Generali Investments Europe S.p.A. Società di gestione del risparmio, periodically updating the contents of this document, relieves itself from any responsability concerning mistakes or omissions and shall not be considered responsible in case of possible changes or losses related to the improper use of the information herein provided. Opinions expressed in this document represent only the judgment of Generali Investments Europe S.p.A. Società di gestione del risparmio and may be subject to any change without notification. They do not constitute an evaluation of any strategy or any investment in financial instruments. This document does not constitute an offer, solicitation or recommendation to buy or to sell financial instruments. In this document decision based on this document. Generali Investments Europe S.p.A. Società di gestione del risparmio is not liable for any investment decision based on this document. Generali Investments Europe S.p.A. Società di gestione del risparmio consent of Generali Investments Europe S.p.A. Società di gestione del risparmio.

This document is prohibited without prior consent of Generali Investments Europe S.p.A. Società di gestione del risparmio.

Generali Investments is part of the Generali Group which was established in 1831 in Trieste as Assicurazioni Generali Austro-Italiche. Generali Investments is a commercial brand of Generali Investments Europe S.p.A. Società di gestione del risparmio.

