



Transmission and side effects of the ECB's Asset Purchase Programme

ECB Bond Market Contact Group 19 January 2016

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Key themes

- (1) How large is the upsized APP?
- (2) First evidence on the pass-through of the APP
- (3) APP side-effects and impact on liquidity
- (4) Foreign reserve selling undermining QE?



How large is the revised Asset Purchase Programme?

post-Dec

ECB APP purchases increased by €680bn* to €2180bn in December

Committed cash value of QE purchases in € bn

re-investment (€320bn)

programme extension (€360bn)

After the 3Dec meeting, the Bundesbank was able to buy €270bn more

2y+ German paper trading below the depo rate in € bn



* According to speech by ECB President Draghi on 4 December Source: ECB, Bloomberg, Commerzbank Research

pre-Dec

2500

2000

1500

1000

500

0



The PSPP does still not look large on international comparison...





^{*} Assumed end of programme in March 2017; ** BoJ purchases until Dec 2015

Source: ECB, BoJ, Fed, BoE, euro area debt agencies, US Treasury, SIFMA, Bloomberg, Commerzbank Research



Financial Scorecard: the initial success is wearing thin



Source: Bloomberg, Commerzbank Research



Macro Scorecard: Limited success so far

	Objective	Indicator	Benchmark	Score
	Re-anchor inflation expectations	Probability that the ECB Survey of Professional Forecasters (SPF) shows euro zone inflation above 1.5% in 5 years' time	Average before the crisis (2005 to 2007: 83.5%)	₽
 Target achieved Target not yet achieved but trend is in right direction Target not achieved and trend is in wrong direction 			Distance from long-term model value is less than one standard deviation	-
	Core inflation back at just under 2%	Consensus forecast for inflation in 2016	Consensus forecast corresponds at least to ECB's March 2015 projection for 2016 (1.5%)	` ↓
		Unemployment rate	Unemployment rate on track to reach 8% at end of 2016	₽
	Stimulate economy	Purchasing Managers' Indices (PMIs) for manufacturing and service sector	PMIs are above 50 and 3-month average is pointing upwards	
		Consensus forecast for economic growth in 2016	Consensus forecast corresponds at least to ECB projection in March 2015 (1.9%)	-
	Weaker euro	Share of euro depreciation that is attributable to euro weakness	Path leading to a depreciation of 5% per year	
	Open lending channel	Average borrowing costs in five largest euro countries	1 percentage point below average 2014Q3 (2.7%)	
		Real interest rate: 5-year Euro Swap minus 5-year Euro Inflation Swap	-1.3% (assumed swap rate of 0.5% minus 1.8% inflation expectations)	-
		Year-on-year change in lending to private sector in per cent	Target path to a growth rate of around 3½% (model forecast requires economic growth of 2% and a rise in investment of 4% at end of 2016)	

Source: Commerzbank Research



Analysts still have doubts about ECB inflation credentials

Survey of Professional Forecasters: likelihood that inflation rate will be above 1.5% in 5 years' time Consensus forecasts for 2016, broken lines: ECB projections of March 2015



Source: ECB, Commerzbank Research

Rates & Credit Research



Market questions ECB inflation target

€5y5y ILS forward in % and model using core inflation, change in oil price level and changes in risk perception



Source: Commerzbank Research



Inflation expectations appear anchored by oil, not ECB!





Source: Bloomberg, Commerzbank Research

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Euro depreciation is not on course

Change in value of euro since 1 November 2014 due to euro-specific factors (computed via PCA analysis) in per cent



Source: Commerzbank Research



Some improvements via the lending channel

Lending to the private sector, year-on-year change Borrowing costs for businesses in per cent p.a., average for Germany, France, Spain, Italy and in per cent **Netherlands** 14 4.0 12 3.5 10 8 3.0 6 2.5 4 2 2.0 0 1.5 -2 1.0 -4 2012 2013 2014 2015 2006 2008 2010 2012 2016 2014 cost of borrowing ---- average Q3-14 target loan growth target

Source: ECB, Commerzbank Research

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QE transmission: ECB painting a rosy picture...

Overview of the impact of the expanded APP on euro area banks' financial situation, net percentage of respondents



Purposes for which euro area banks use the additional liquidity from the expanded APP, average percentage of respondents per category



Source: ECB Bank Lending Survey, October 2015



... but is the programme really effective?

"Over the past six months, did your bank use the additional liquidity arising from the ECB's expanded asset purchase programme for granting loans to non-financial corporations and to households?", percentage average



"Over the past six months, did your bank use the additional liquidity arising from the ECB's expanded asset purchase programme / past TLTROs for granting loans to non-financial corporations?", percentage average



Source: ECB, Commerzbank Research

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Transmission of the ECB's Asset Purchase Programme

Michael Krautzberger – Head of BlackRock's European Fundamental Fixed Income

ECB Bond Market Contact Group - 19 January 2016

For professional clients / qualified investors only

I. How large is the upsized APP?

II. First evidence on the pass-through of the APP

III. APP side-effects and impact on liquidity

IV. Foreign reserve selling undermining QE?

QE assets clearly dominate the global valuation landscape

- Government bonds remain expensive but revaluations in spread sectors.
- Equity markets have revalued following China correction.
- Valuation divergence present in EM.





Sources: Thomson Reuters and BlackRock Investment Institute, 31 October 2015.

Debt Fuelled Buybacks

- Buybacks have delivered the highest shareholder return of any form of capital management since 1985.
- Multiple expansions hiding flat or falling earnings. Japan is the exception.
- Tightening financial conditions should promote a renewed attentiveness towards revenue growth in 2016.
- Best markets in 2015 driven by earnings growth, same again in 2016.



Sources: BlackRock Investment Institute, Federal Reserve and IMF, October 2015. Equity returns to November 30th 2015.

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Flow picture: clients move up the duration and risk curve



iShares flows into Euro money market and short-

iShares flows into Euro government and corporate bonds (cumulative flows \$ mn)



Source: iShares, Bloomberg as of December 2015

Bid-offers optically still look ok



10Y bonds bid-ask spreads for select European countries (price bp)

Italian government bonds bid-ask spreads by tenor (yield bp)



Source: MarketAxess, BlackRock as at December 2015

Changes in the liquidity of FI futures and the EGB market



Size of the European government bond market (in €bn)



Source: EUREX, Bloomberg as of November 2015

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Post QE market changes: reduced market depth and ECB the biggest buyer



Intra-day data for benchmark bonds from MTS-EBM, calculated as (volume at bid + volume at ask) / 2 $\,$

*) estimated **) US and Japanese investors

Source: BIS, Commerzbank Research as of October 2015

We expect foreign demand for U.S. Treasuries to be materially diminished in an environment of sustained lower oil prices



...helping them fund large fiscal deficits





BUT FOREIGN OFFICIAL & PRIVATE INVESTORS COMBINED ARE ADDING <u>NO</u> NEW DEMAND FOR TREASURIES ON A NET BASIS



Source: BlackRock as at November 2015

Further topics for discussion

- 1. Which changes to the design of the APP should be considered to increase its effectiveness and reduce negative side effects?
- 2. Which buying techniques/systems should be used to ensure smooth execution as the APP progresses?
- 3. How can the ECB prepare an exit without causing larger distortions?
- 4. Who takes over from the ECB buyer in an exit scenario? Sovereign wealth funds?
- 5. Banks unlikely to fill the gap under tougher capital requirements
- 6. Will the mutual bond funds still be a reasonable source of buying power after years of low and negative rates?
- 7. Implications from any unwind of excessive risk taking by investors

Appendix

Deposit rate	in CHF	in DKK	in EUR	in SEK
High	-0.75%	-0.35%	-0.20%	-0.10%
Average	-1.05%	-1.09%	-0.33%	-0.65%
Low	-1.75%	-2.00%	-0.50%	-1.10%

Source: Deposit interest rates of the following banks as at November 2015: Bank Boston Home Equity, BNP Paribas, BNY Mellon, Caceis Bank Luxembourg SA, Citigroup Inc., Credit Suisse Group AG, Danske Bank, JPMorgan Chase, KAS Bank NV, Northern Trust Corp, Banque Pictet & Cie SA, Royal Bank of Canada, State Street Bank & Trust

Negative interest rates on 40% of outstanding European government bonds



Source: Bloomberg, Deutsche Bank as of November 2015

Yield seeking investors are increasingly pushed to the most risky part of the market

- > Yield seeking behaviour has driven risk appetite.
- > 2015 was a record year for issuance, with debt-financed M&A and share repurchases as main catalysts



US IG issuance vs M&A activity



Source: BlackRock GCM, Goldman Sachs, Dealogic

Source: BlackRock, Bloomberg, Citi as at November 2015

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How long can government bonds maintain risk diversification benefits at those extreme levels?

- > This reflects asset shortages across bonds and equities caused by QE.
- Reversal/reduction could stimulate material loss and limited diversification.
- A dormant volcano in an exit scenario?

Equity Bond Correlation and the Term Premium



Sources: Thomson Reuters, Federal Reserve, Goldman Sachs, BlackRock Investment Institute, data through 12 November 2015 Note: Equity/Bond correlation shows 90-day rolling correlation of daily returns for the S&P 500 and the US 10Y Treasury

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European Fixed Income market by average daily volume



Inflation is low but so is economic recovery



U.S. and Eurozone Inflation Expectations & the Oil

Current vs. Past Recoveries from Recession, 1960-2015

Source: BlackRock Investment Institute as of December 2015

Market based inflation expectations depend on instrument



Global petrodollar investments to fall

We estimate oil exporters' aggregate current account surplus – a good proxy for global petrodollar investments – will fall by ~\$367 billion in 2015, with ~\$293 billion coming from a reduced bid for U.S. investments (assuming conservatively that 80% of petrodollar investments end up in U.S. either directly, or indirectly via low-yielding current account surplus economies like Japan & Euro area).



Source: BlackRock as at November 2015

Chinese reserves flows

Declining Chinese FX reserves are compounding the reduction in the petrodollar bid for U.S. investments, with other EM central banks also likely to remain under pressure in 2016 as the Fed normalizes.



Source: BlackRock as at November 2015

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