

## ECB QE Monitor – August 08, 2017

**> The Eurosystem started its QE in March 2015. The four main episodes have been:**

- March 9 2015 (decision to purchase €60 bn of assets per month until Sept. 2016),
- December 3 2015 (decision to extend the QE it until March 2017),
- March 10 2016 (decision to increase monthly purchases from €60 bn to €80 bn from April 2016)
- December 8 2016 (decision to extend the QE until December 2017 at a reduced monthly pace of €60bn).

**For the time being, the Eurosystem has already purchased € 1992 bn of assets under the expanded APP since March 2015, including € 1671 bn under the Public Sector purchase Programme (PSPP) and € 103 bn under the Corporate Sector Purchase Programme (CSPP), and still has to buy € 288 bn of assets until December 2017.**

**> Key points for this month:**

- **The deviation from the capital key rule has been less intense in July as the share of French securities declined slightly. The share of German securities remains slightly below Germany's weight at the ECB capital.**
- **The average maturity of German purchases remained low at 5.3 years in July. However, the average maturity has increased for French and Italian securities to reach new highs (respectively 14.7 and 10.8 years)**
- There has been no slowdown of APP purchases in July.
- The Eurosystem holds now more than €400 bn.
- The amount of banks' excess reserves hit €1750 bn.

## ECB asset purchase programme



Assets bought under the expanded Asset Purchase Programme (APP) (04/08/2017)	
€194.3 bn	Third Covered Bond Purchase Programme (CBPP3)
€103.4 bn	Corporate Sector Purchase Programme (CSPP)
€24.7 bn	Asset-Backed Securities Purchase Programme (ABSPP)
€1671 bn	Public Sector Purchase Programme (PSPP)
87.4%	% of expanded APP implementation

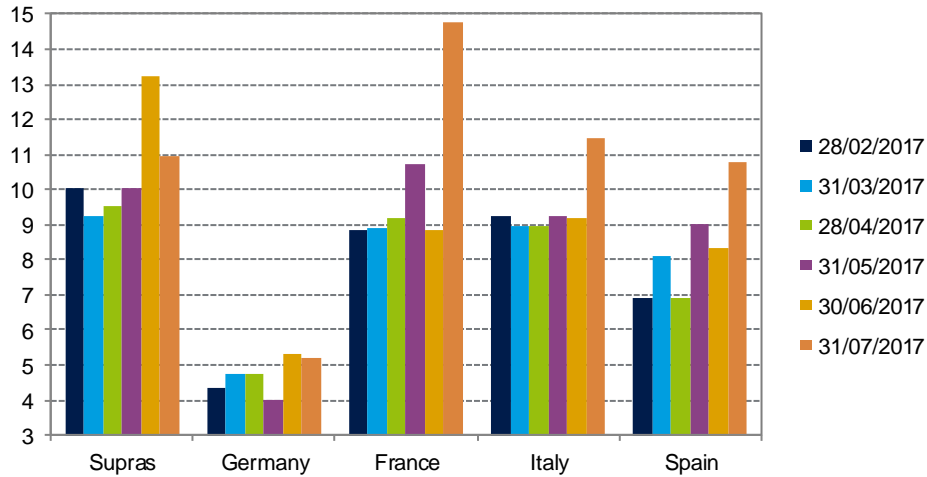


## Assets bought under the PSPP

Assets bought under the PSPP (31 July 2017)		
Country	Holdings (€bn)	Weighted average remaining maturity
Germany	404.1	7.0
France	325.3	7.8
Italy	283.7	8.6
Spain	201.1	8.5
The Netherlands	90.5	7.7
Belgium	56.8	10.3
Austria	45.1	9.2
Portugal	28.7	8.7
Finland	26.1	7.3
Ireland	22.4	8.7
Slovakia	10.0	8.2
Slovenia	6.0	9.6
Luxembourg	2.1	5.7
Latvia	1.6	7.9
Lithuania	2.7	6.8
Malta	1.0	11.0
Cyprus	0.2	4.6
Estonia	0.1	1.0
Supranationals	183.2	7.5
<b>Total</b>		0.0

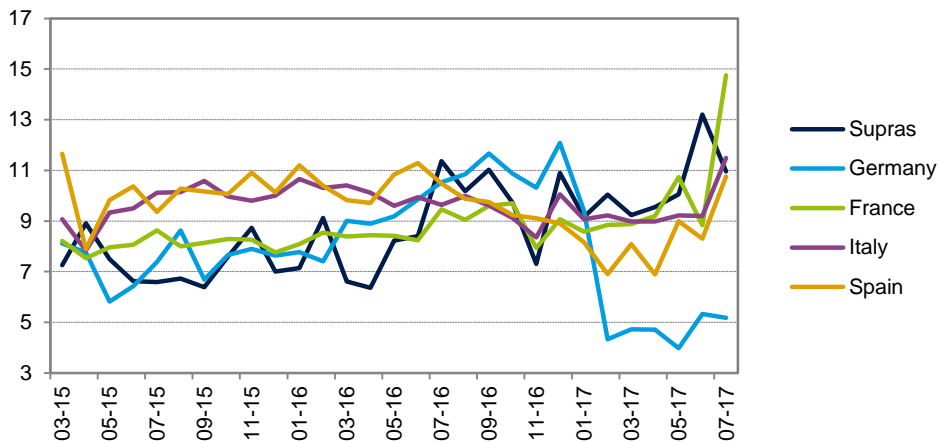
> **Maturity of PSPP purchases**

**Average maturity of PSPP purchases (in years)**



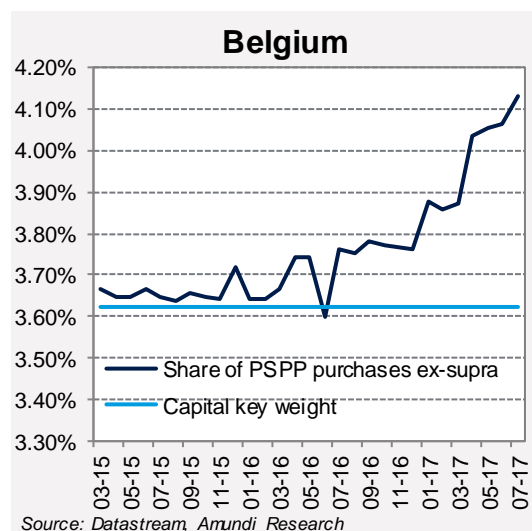
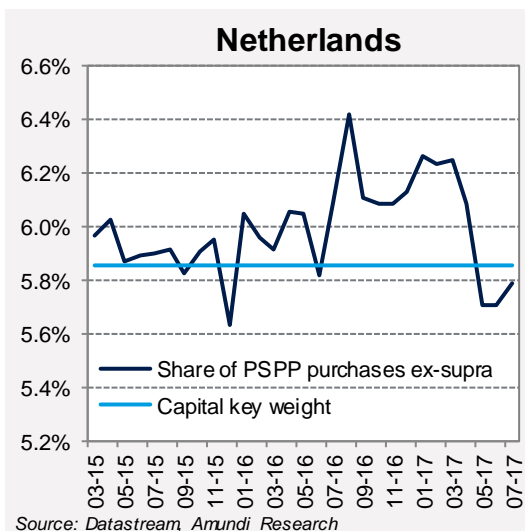
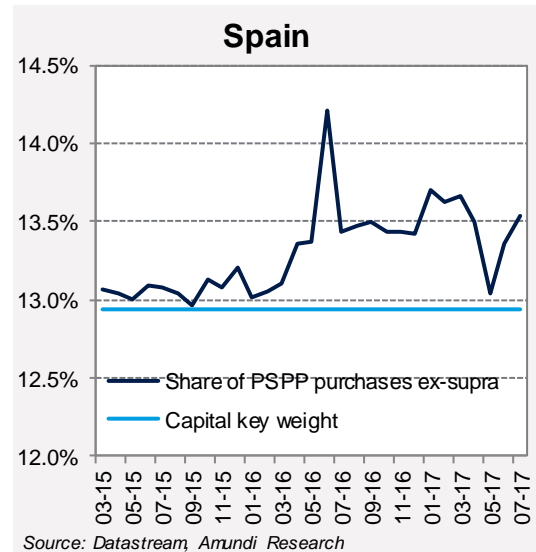
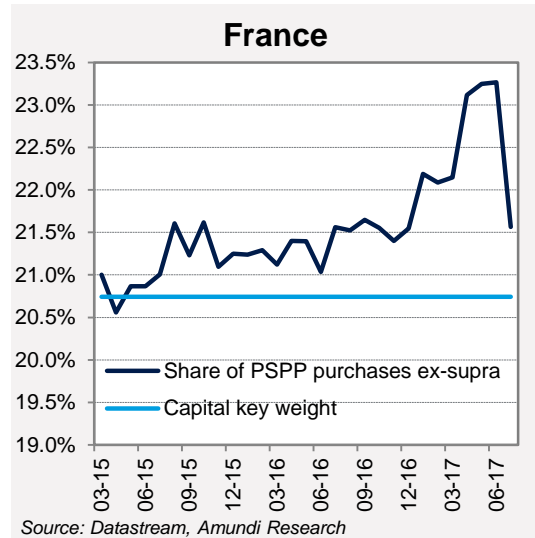
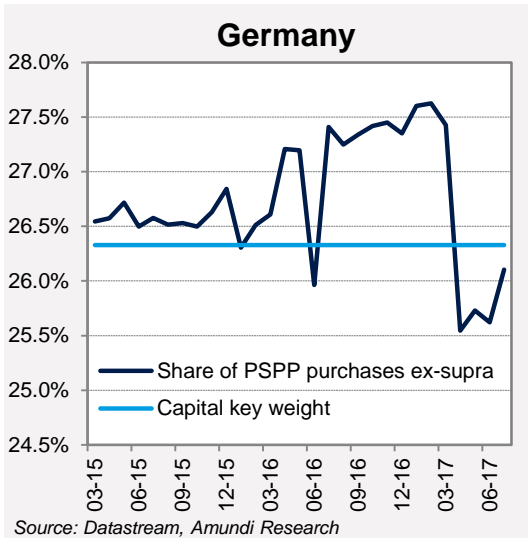
Source: Datastream, Amundi Research

**Average maturity of PSPP purchases (in years)**

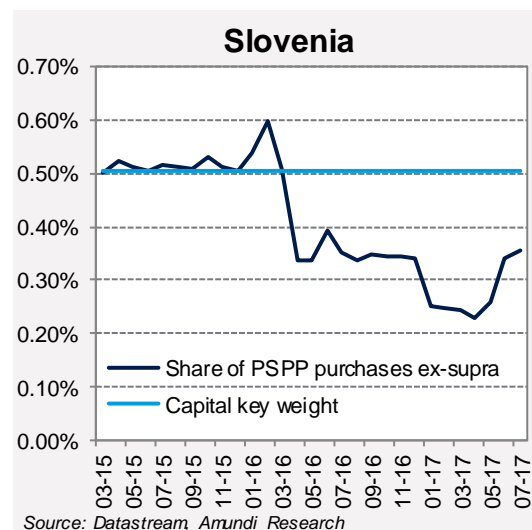
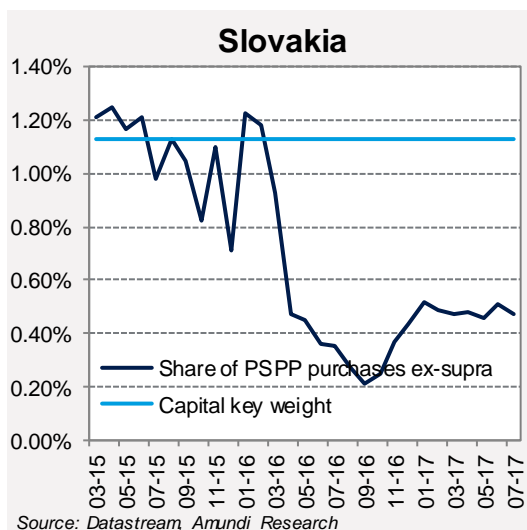
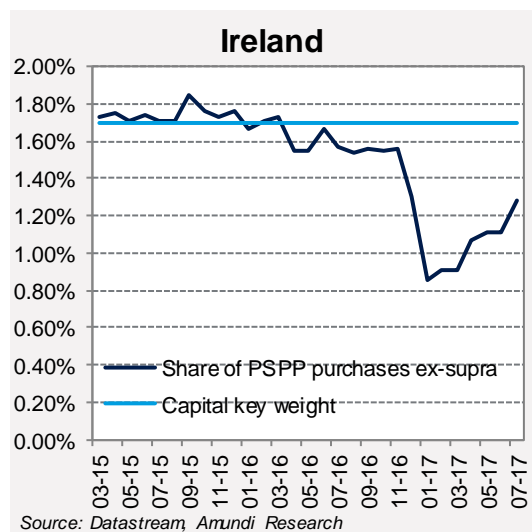
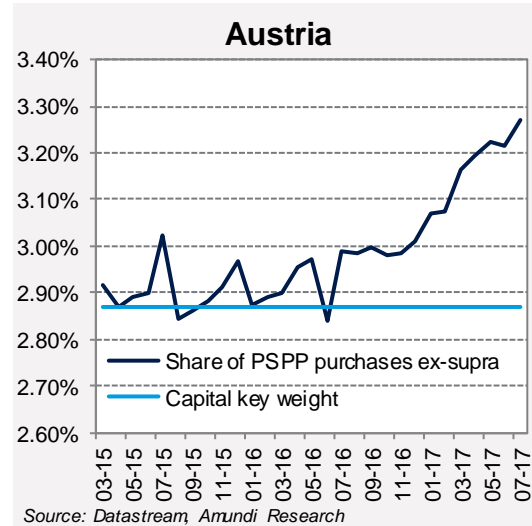
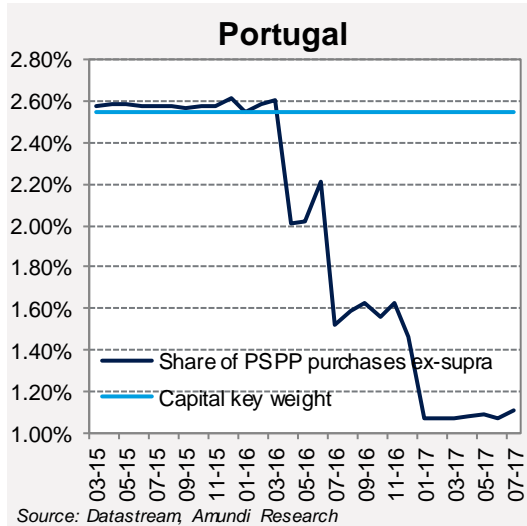


Source: Datastream, Amundi Research

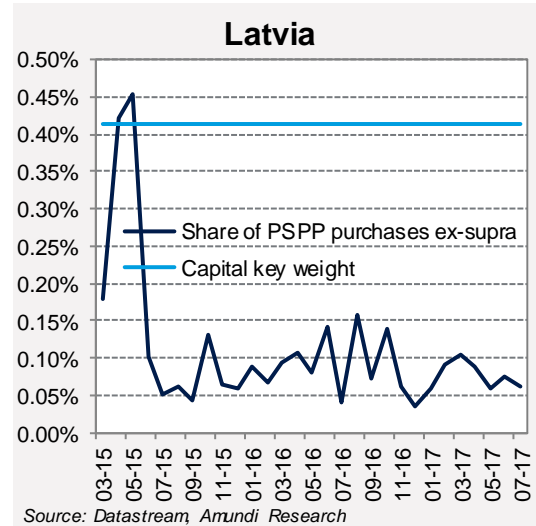
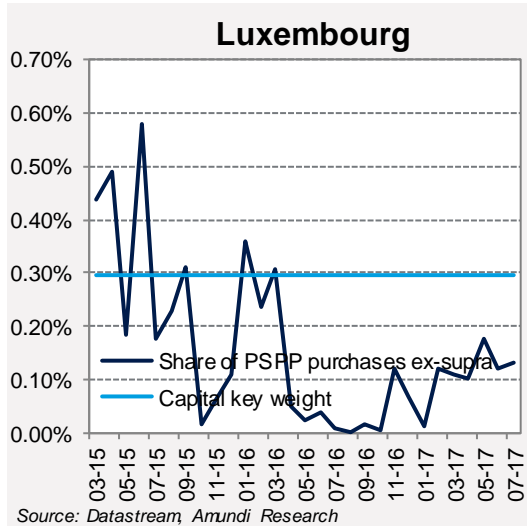
> **Breakdown of PSPP purchases by country (1/3)**



> **Breakdown of PSPP purchases by country (2/3)**

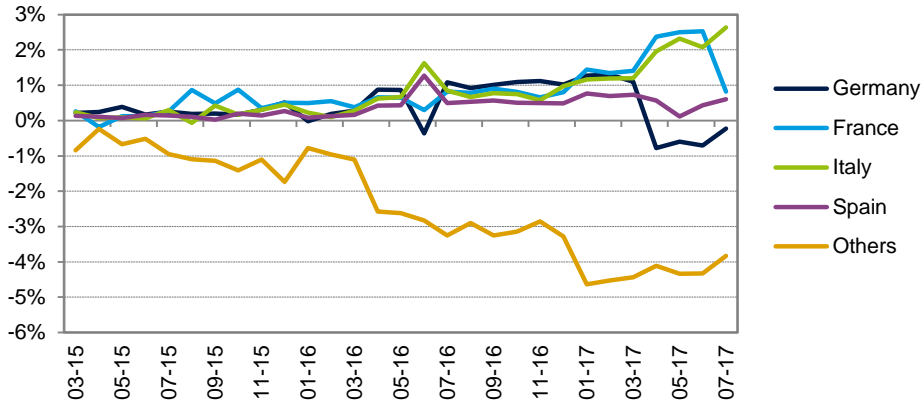


> **Breakdown of PSPP purchases by country (3/3)**



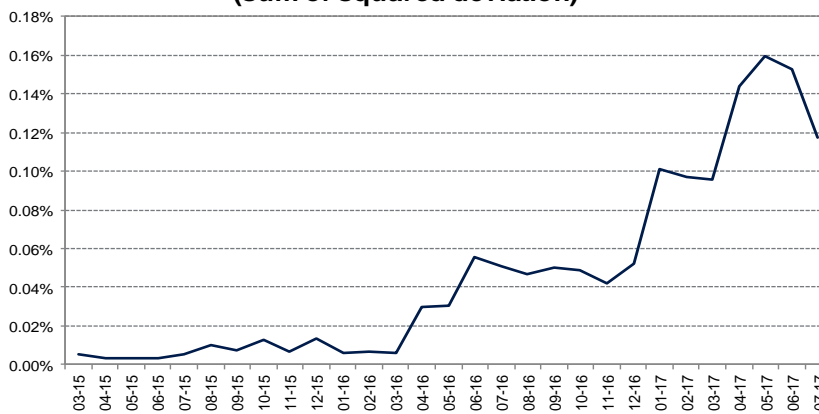
> **Deviation from the “capital key rule”**

**Deviation from the capital key rule  
(as % of PSPP purchases ex-supra)**



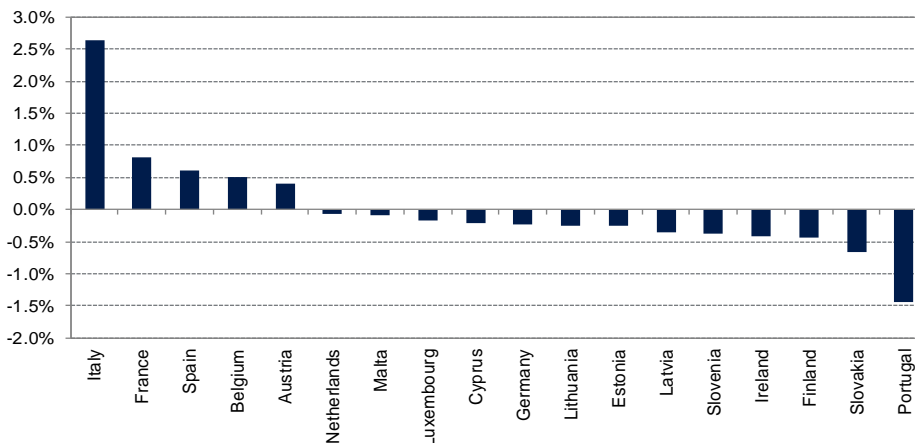
Source: Datastream, Amundi Research

**Deviation to the capital key rule  
(sum of squared deviation)**



Source: Amundi Research

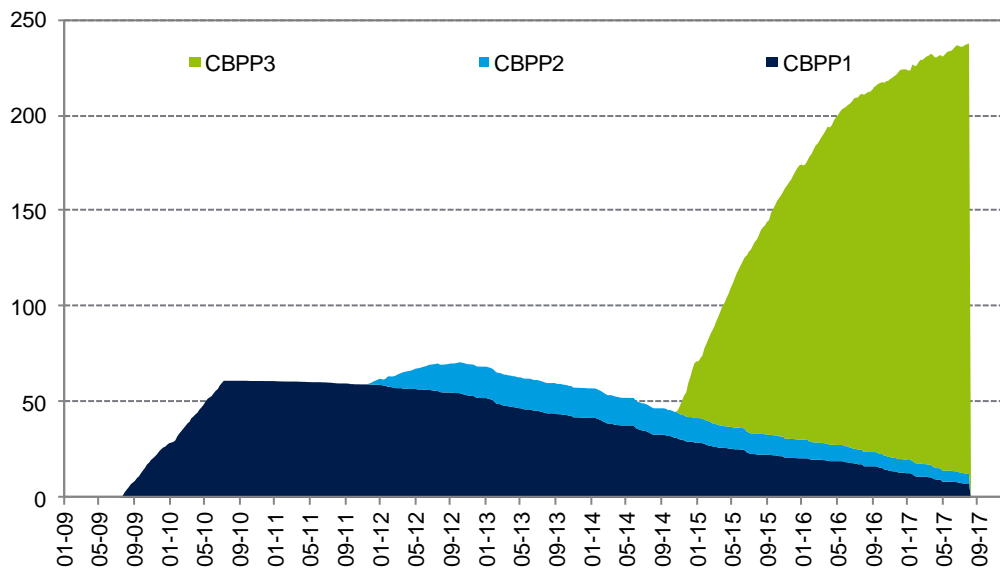
**Deviation from capital key rule in July 2017  
(as % of total PSPP purchases ex-supra)**



Source: Datastream Amundi Research

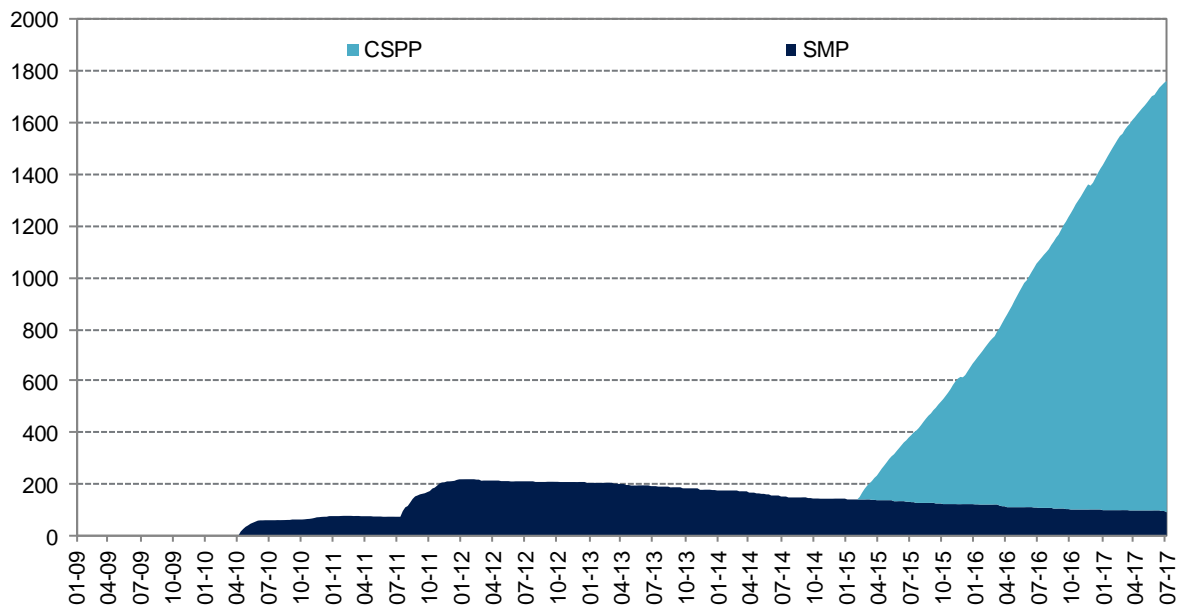
**> Asset purchase programme: CBPP, SMP and PSPP (outstanding, € bn)**

**Covered bonds purchased by the ECB  
(outstanding €bn)**



Source: Datastream, Amundi Research

**Sovereign bonds purchased by the ECB  
(outstanding €bn)**

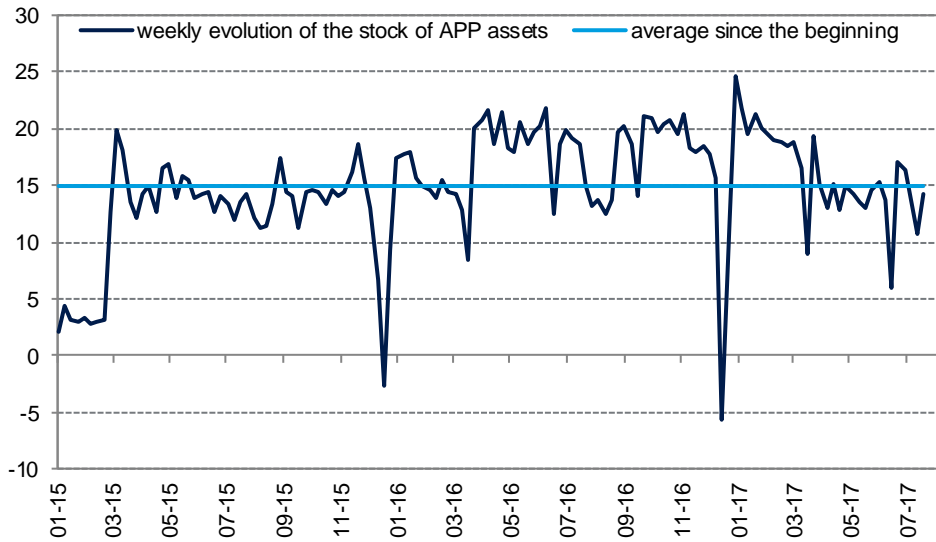


Source: Datastream, Amundi Research



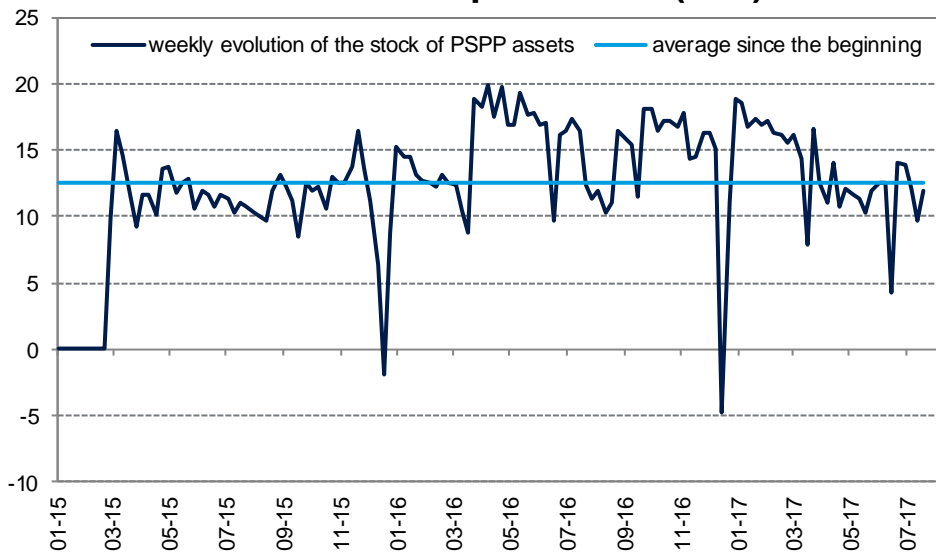
**> Pace of APP purchases (weekly change of the stock, € bn) (1/2)**

**Pace of PSPP purchases (€bn)**



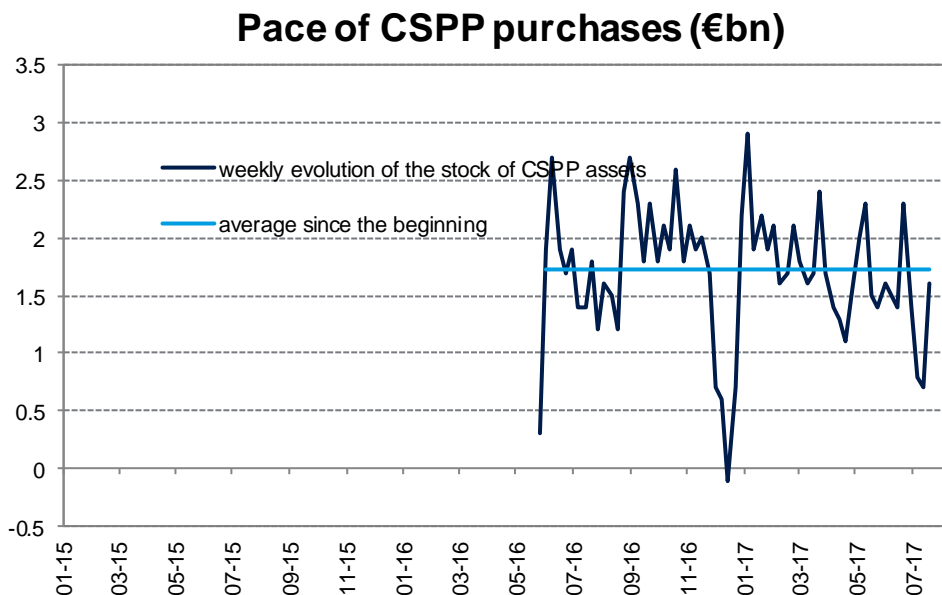
Source: Datastream, Amundi Research

**Pace of APP purchases (€bn)**



Source: Datastream, Amundi Research

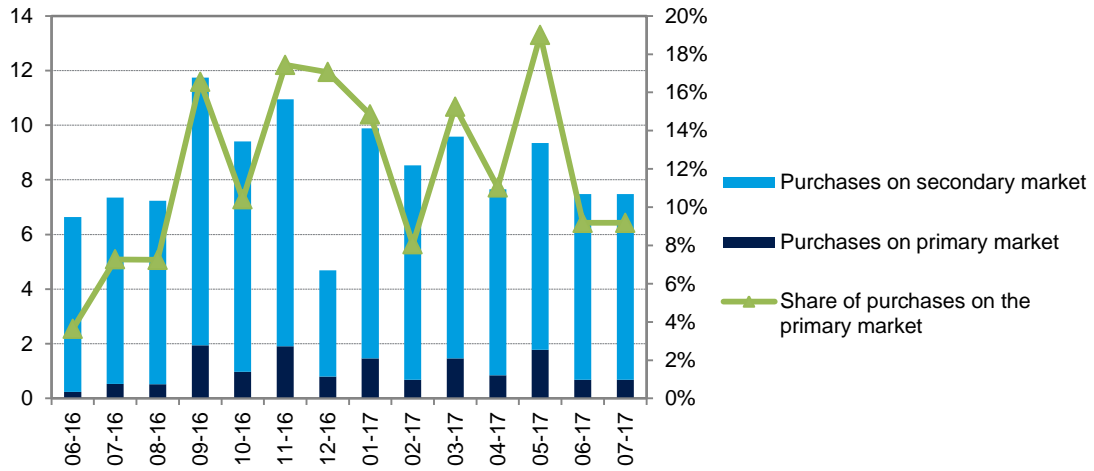
**> Pace of APP purchases (weekly change of the stock, € bn) (2/2)**



Source: Datastream, Amundi Research

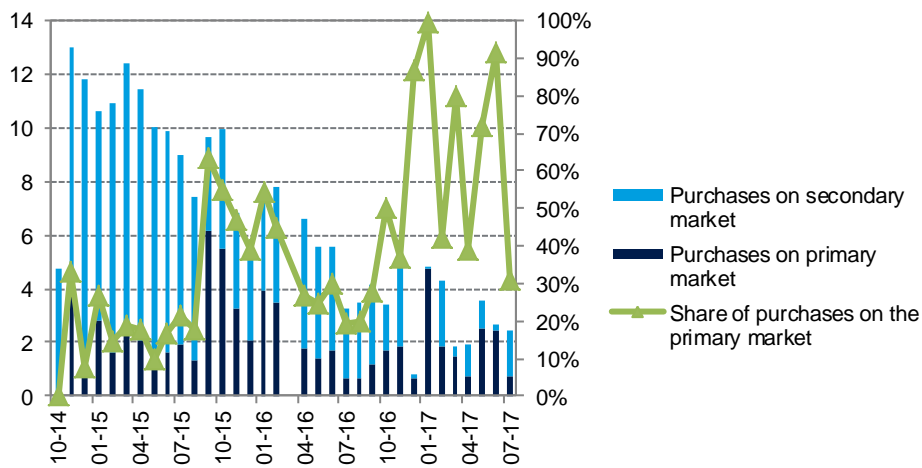
NB: ECB data take amortization adjustments into account. “The amortization emerges from an accounting principle that implies that securities purchased at prices below face value have to be revalued upwards over time towards maturity, and revalued downwards over time, if purchased at prices above face value.” This may explain negative figures.

**> Breakdown of CSPP monthly purchases**



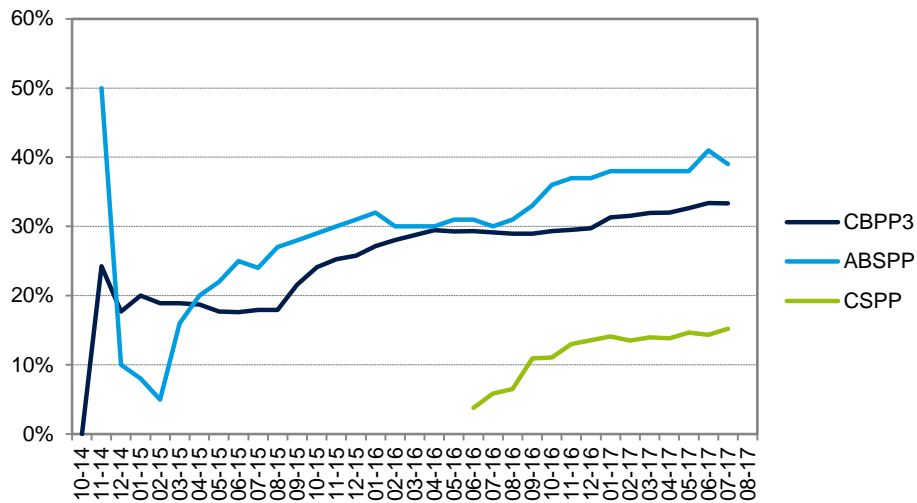
Source: Datastream, Amundi Research

**> Breakdown of CBPP3 monthly purchases**



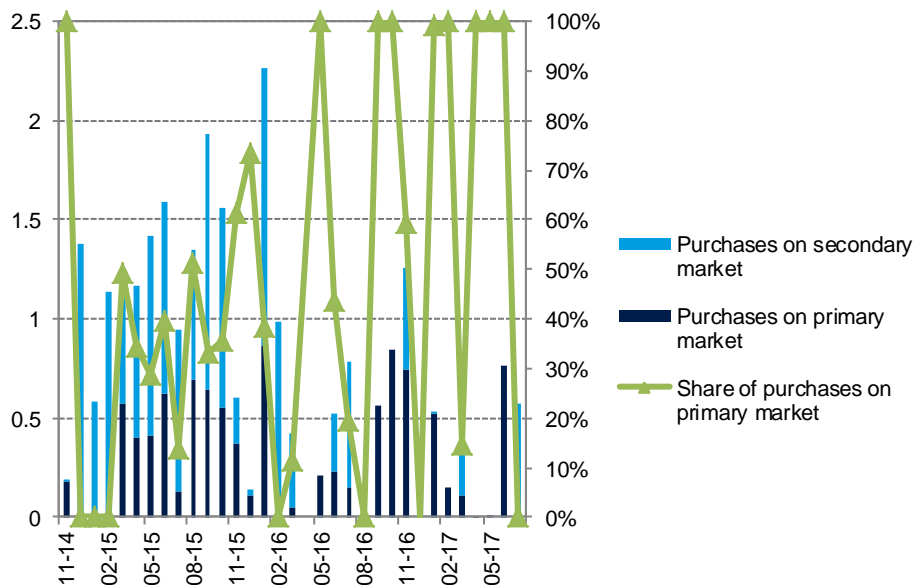
Source: Datastream, Amundi Research

> **Share of purchases on the primary market as % of cumulated purchases**



Source: Datastream, Amundi Research

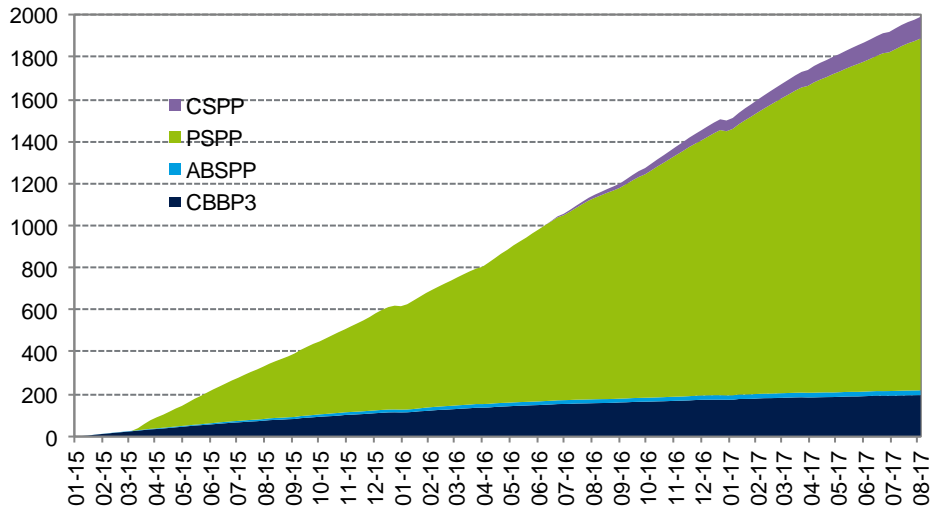
> **Breakdown of ABSPP monthly purchases**



Source: Datastream, Amundi Research

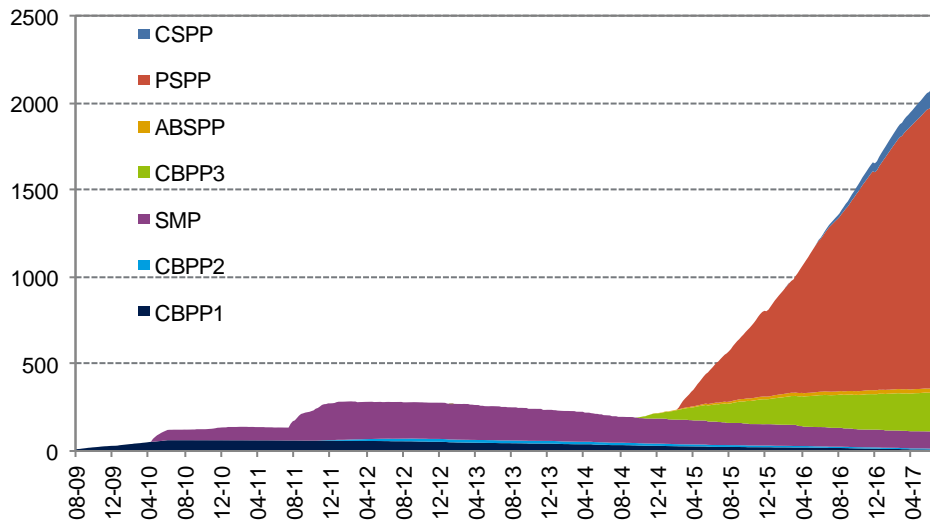
**> Eurosystem : Balance Sheet (1/2)**

**Amounts purchased by the Eurosystem under the expanded asset purchase programme (€ bn)**



Source: Datastream, Amundi Research

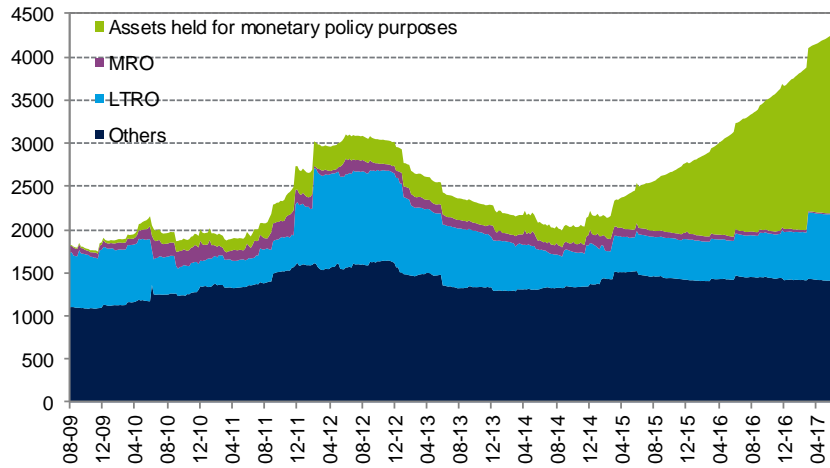
**Assets held by the Eurosystem for monetary policy purposes (in €bn)**



Source: Datastream, Amundi Research

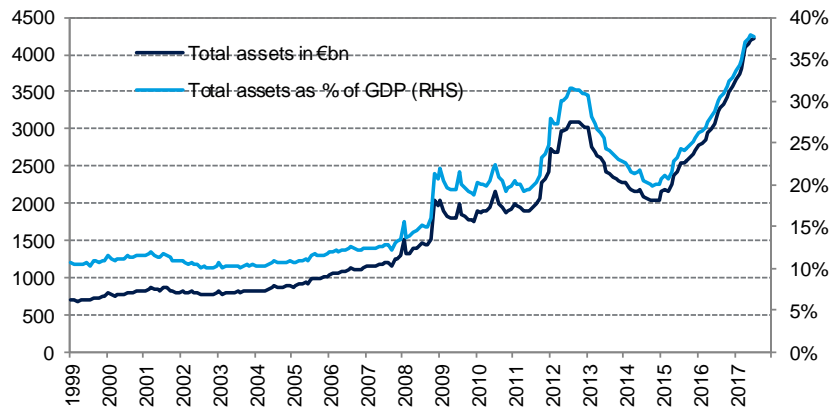
**> Eurosystem : Balance Sheet (2/2)**

**Eurosystem: total assets (in €bn)**



Source: Datastream, Amundi Research

**Eurosystem: total assets**



Source: Datastream, Amundi Research

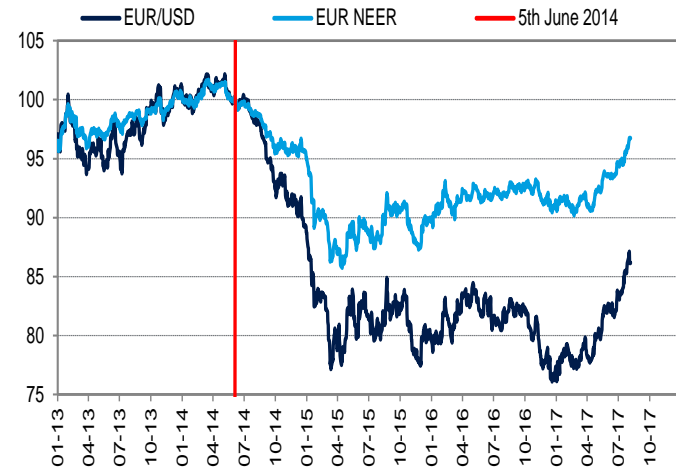
**Eurosystem : excess reserves (€bn)**



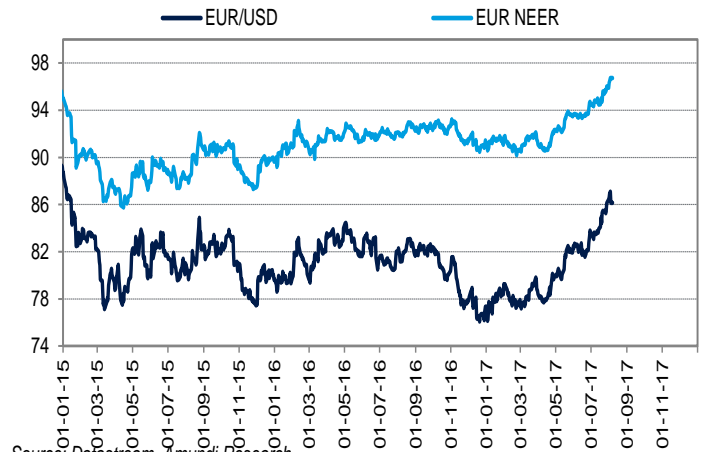
Source: Datastream, Amundi Research

**FX channel**

> **Evolution of the euro (Effective exchange rate, 100 on 5<sup>th</sup> June 2014)**



Source: Datastream, Amundi Research



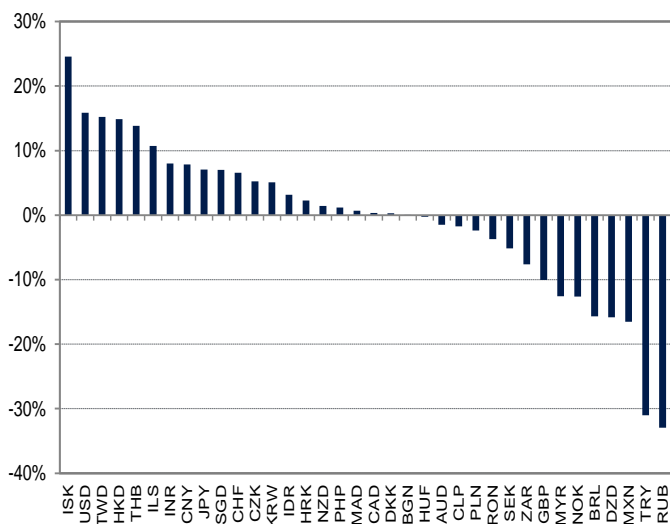
Source: Datastream, Amundi Research

**Evolution of the euro vs. ...**

Since January 2<sup>nd</sup>, 2017

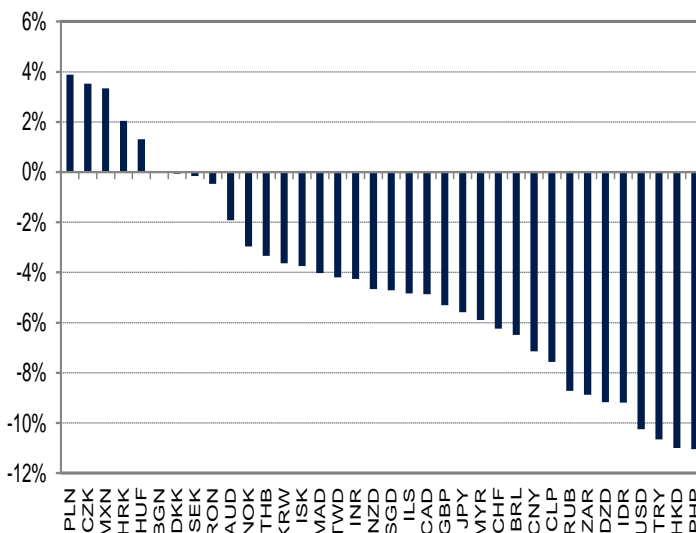
	Weight in effective euro	02/01/2017	07/08/2017	Variation
EUR/CNY	17.7	7.33	7.89	7.7%
EUR/USD	12.7	1.05	1.18	11.4%
EUR/GBP	10.3	0.85	0.90	5.6%
EUR/JPY	5.3	123.02	130.31	5.9%
EUR/CHF	5.5	1.07	1.14	6.7%
EUR/PLN	5.1	4.40	4.24	-3.7%
EUR/CZK	4.1	27.02	26.10	-3.4%
EUR/SEK	3.6	9.58	9.60	0.1%
EUR/KRW	3.2	1273.93	1321.99	3.8%
EUR/HUF	2.3	308.87	304.85	-1.3%
EUR/DKK	1.7	7.44	7.44	0.1%
EUR/RON	1.7	4.54	4.56	0.5%
EUR/CAD	1.2	1.41	1.49	5.1%
EUR/HKD	1.4	8.18	9.19	12.4%
EUR/SGD	1.3	1.52	1.60	5.0%
EUR/NOK	1.0	9.08	9.36	3.1%
EUR/AUD	0.8	1.46	1.49	1.9%
EUR/HRK	0.4	7.56	7.41	-2.0%
EUR/BGN	0.5	1.96	1.96	0.0%
EUR/RUB	3.5	64.39	70.53	9.5%
EUR/TRY	3.3	3.71	4.15	11.9%
EUR/IDR	2.4	14210.12	15648.30	10.1%
EUR/TWD	1.5	33.99	35.48	4.4%
EUR/BRL	1.4	3.43	3.67	6.9%
EUR/MXN	1.3	21.73	21.03	-3.2%
EUR/THB	1.1	37.77	39.08	3.5%
EUR/MYR	1.0	4.73	5.03	6.3%
EUR/ZAR	1.0	14.42	15.83	9.7%
EUR/INR	0.7	71.59	74.77	4.5%
EUR/ILS	0.7	4.06	4.27	5.1%
EUR/MAD	0.6	10.68	11.12	4.2%
EUR/CLP	0.4	706.46	764.21	8.2%
EUR/DZD	0.4	116.44	128.20	10.1%
EUR/PHP	0.3	52.43	58.95	12.4%
EUR/ISK	0.1	119.14	123.78	3.9%
EUR/NZD	0.1	1.51	1.59	4.9%
<b>Effective</b>	<b>100.0</b>	<b>93.5</b>	<b>99.4</b>	<b>6.3%</b>

Since June 5, 2014



Source: Datastream, Amundi Research

Since January 2<sup>nd</sup>, 2017

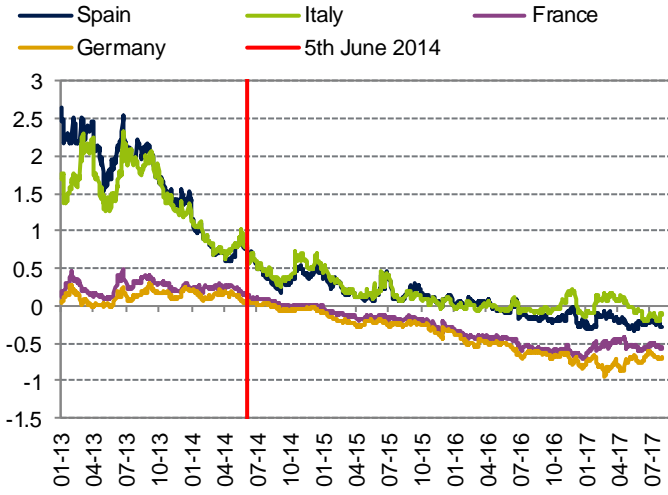


Source: Datastream, Amundi Research

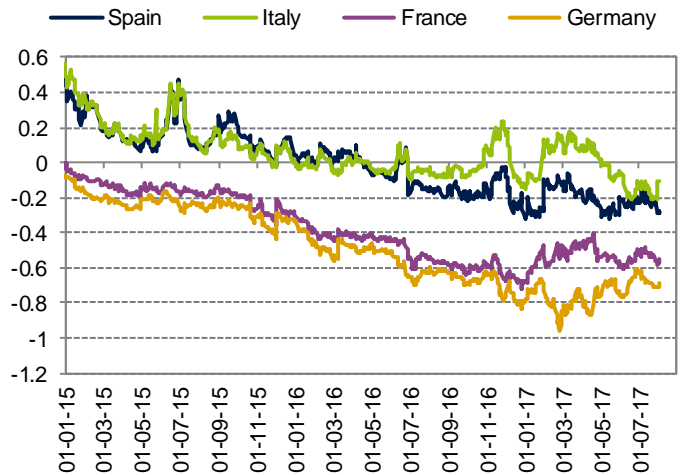


**Interest rate channel**

**> 2Yr sovereign bonds**

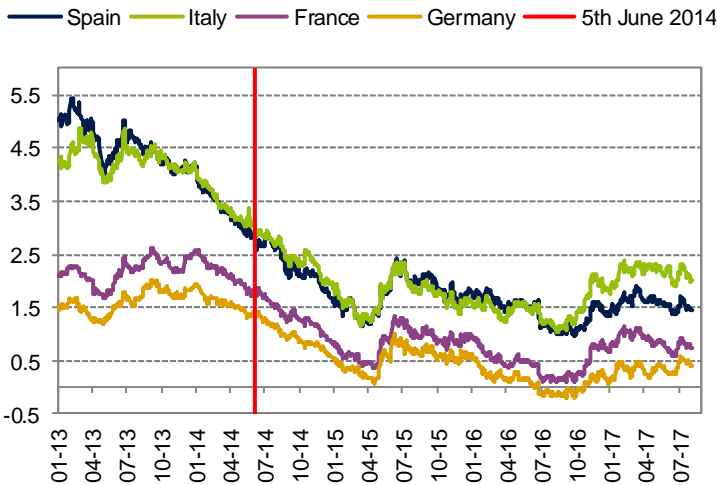


Source: Datastream, Amundi Research

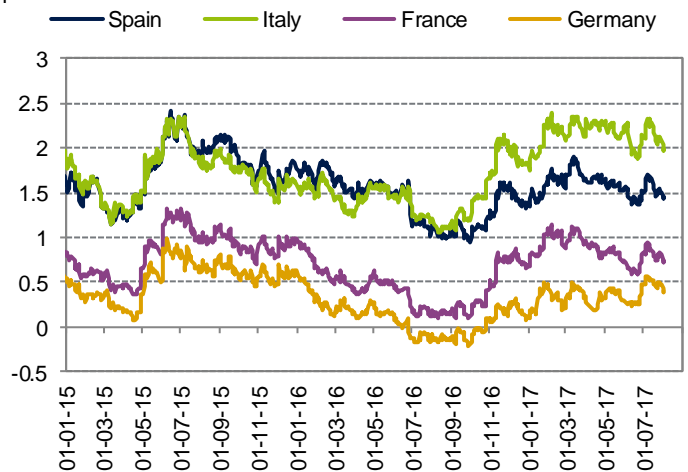


Source: Datastream, Amundi Research

**> 10Yr sovereign bonds**



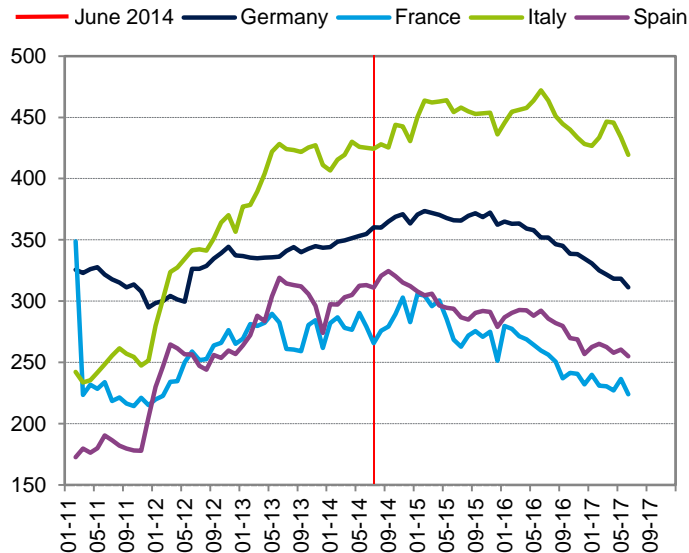
Source: Datastream, Amundi Research



Source: Datastream, Amundi Research

	2 year		10 year	
	05/06/2014	07/08/2017	05/06/2014	07/08/2017
Germany	0.05	-0.70	1.42	0.39
France	0.12	-0.58	1.80	0.74
Italy	0.67	-0.10	3.05	1.99
Spain	0.68	-0.27	2.83	1.45
Netherlands	0.14	-0.64	1.67	0.58
Belgium	0.14	-0.53	1.92	0.76
Ireland	/	/	2.57	0.74
Greece	/	/	6.22	5.38
Portugal	1.13	0.06	3.64	2.84
Austria	0.14	-0.57	1.59	0.64

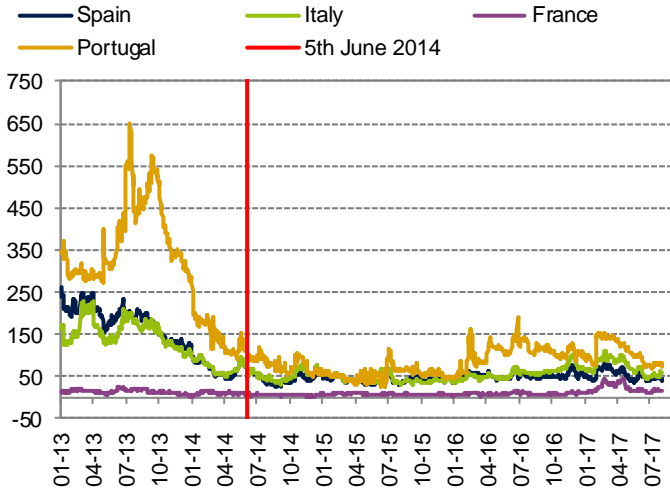
**> Sovereign debt: banks holdings (€ bn)**



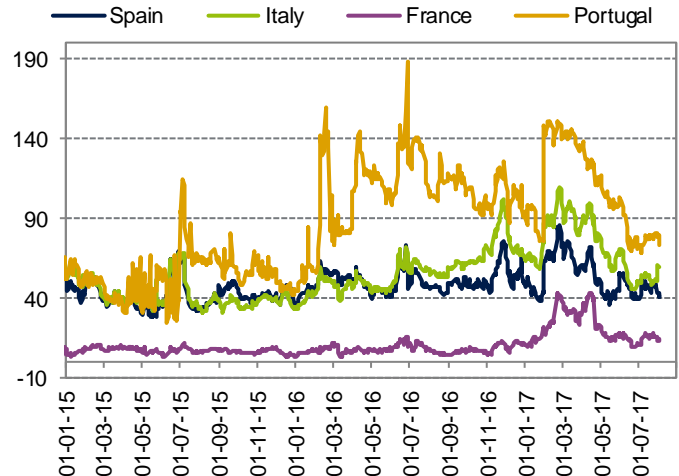
Source: Datastream, Amundi Research

**Spreads channel**

**> 2Yr sovereign spreads**

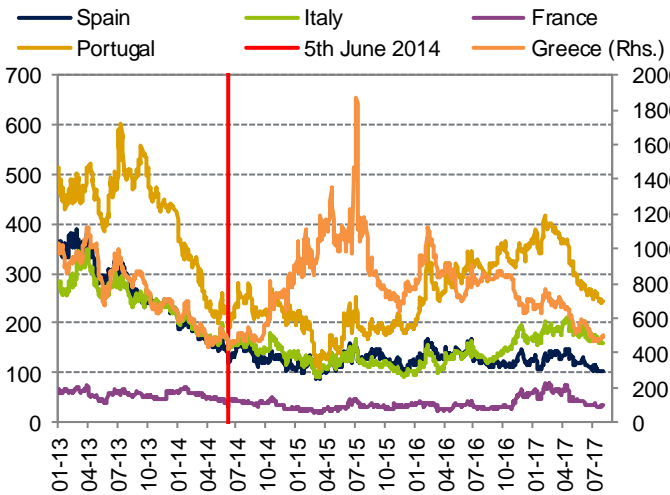


Source: Datastream, Amundi Research

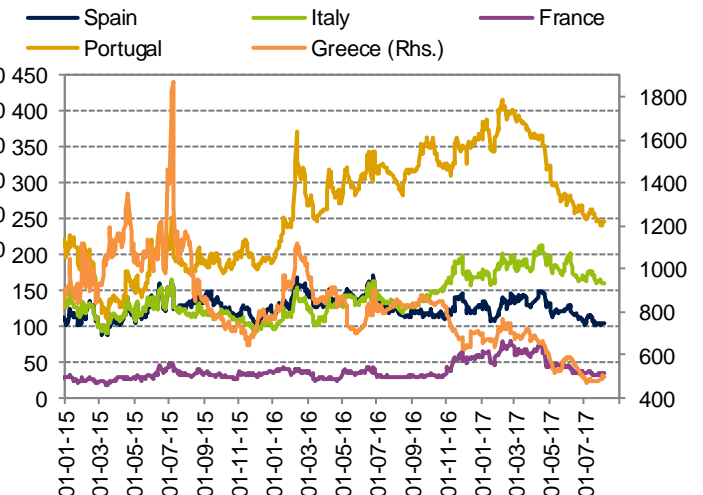


Source: Datastream, Amundi Research

**> 10Yr sovereign spreads**



Source: Datastream, Amundi Research



Source: Datastream, Amundi Research

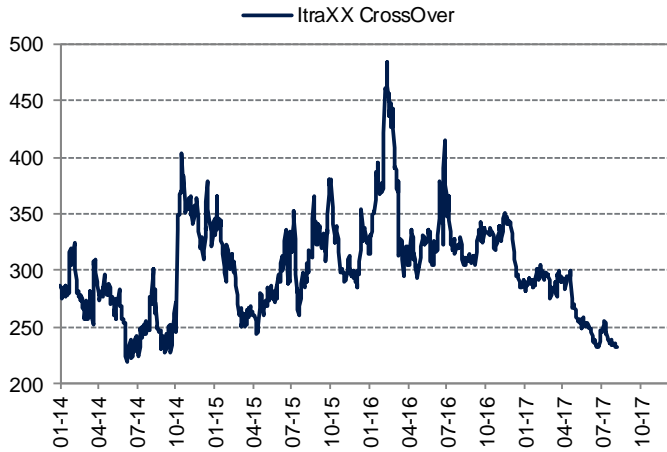
**ItraXX Indices**



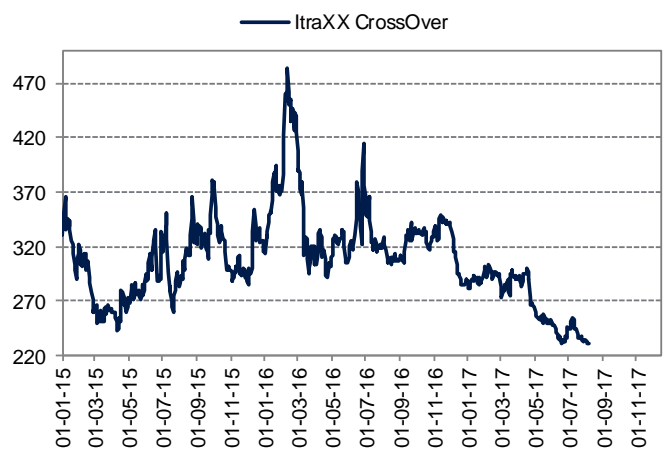
Source: Datastream, Amundi Research



Source: Datastream, Amundi Research



Source: Datastream, Amundi Research

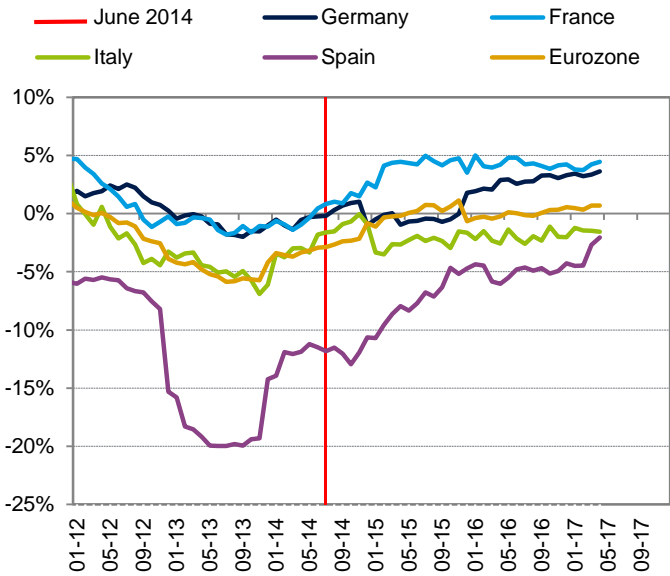


Source: Datastream, Amundi Research

**Banking credit channel**

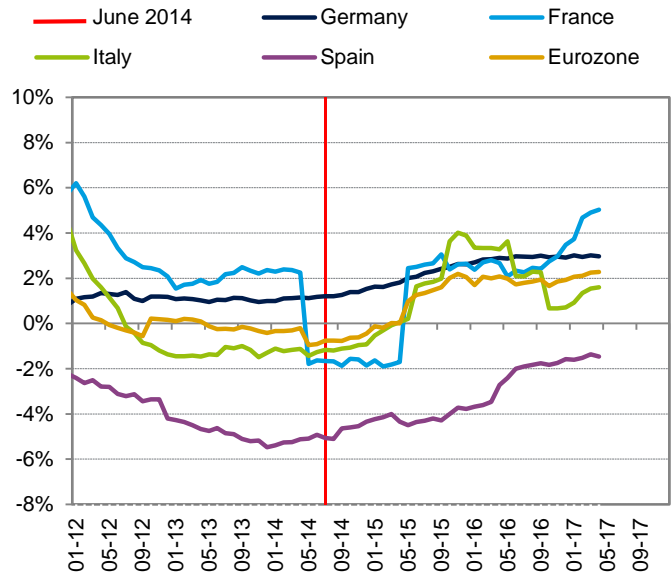
**> Bank loans (YoY)**

To non-financial corporations



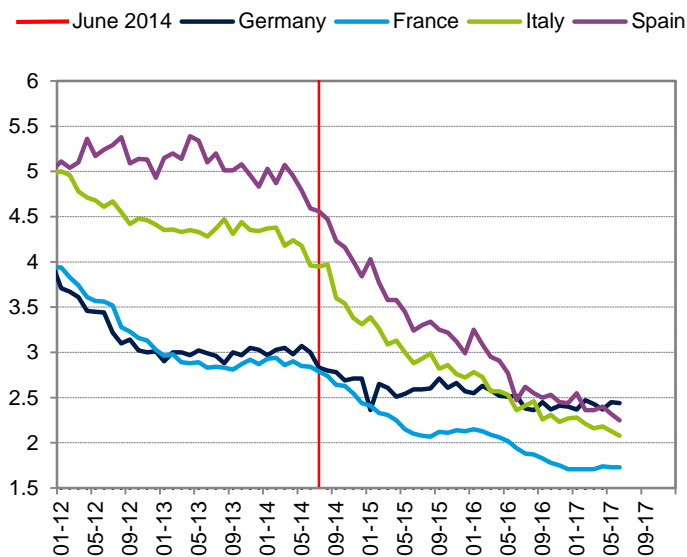
Source: Datastream, Amundi Research

To households



Source: Datastream, Amundi Research

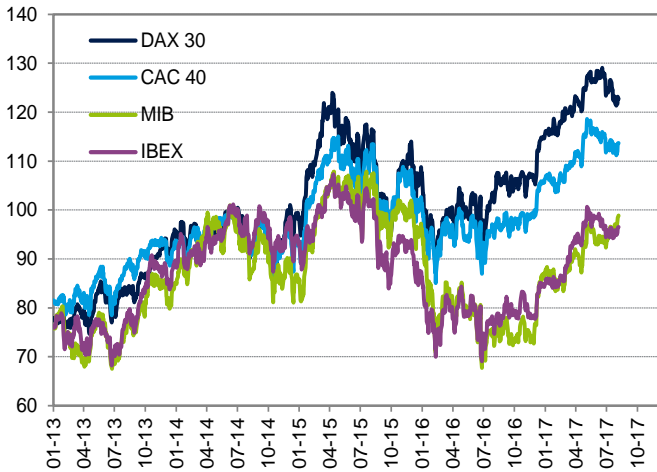
**> Interest rates on new loans to SMEs (< € 1 million)**



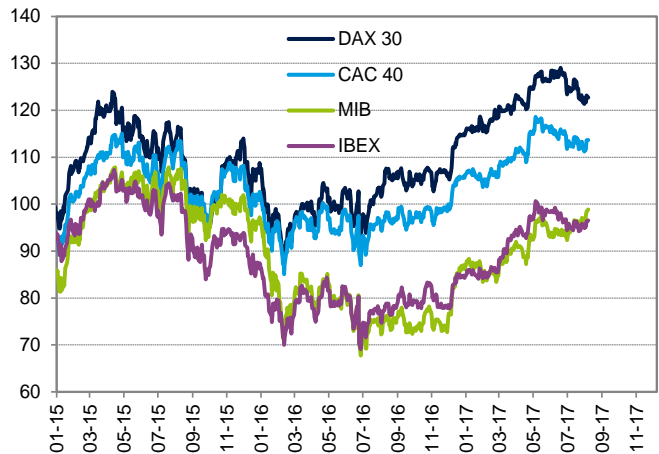
Source: Datastream, Amundi Research

**Wealth effect channel**

**> Equities**



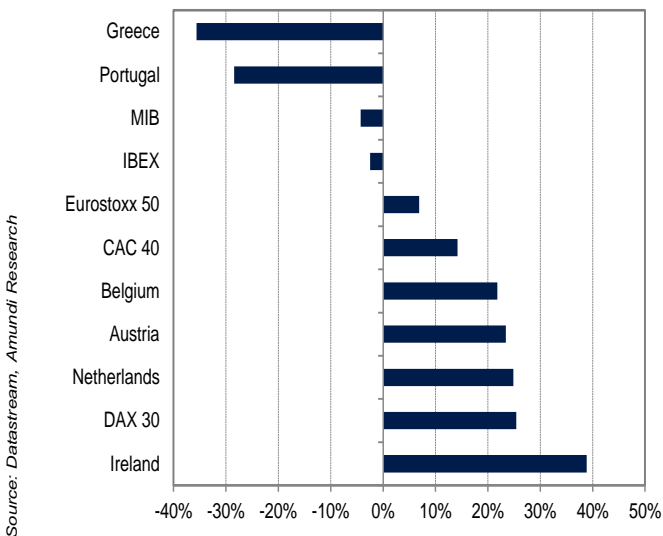
Source: Datastream, Amundi Research



Source: Datastream, Amundi Research

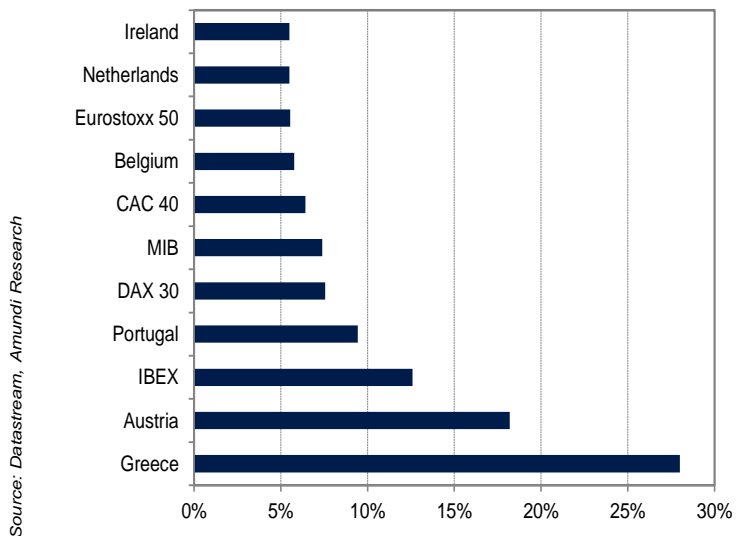
**> Performances**

Since June 5, 2014



Source: Datastream, Amundi Research

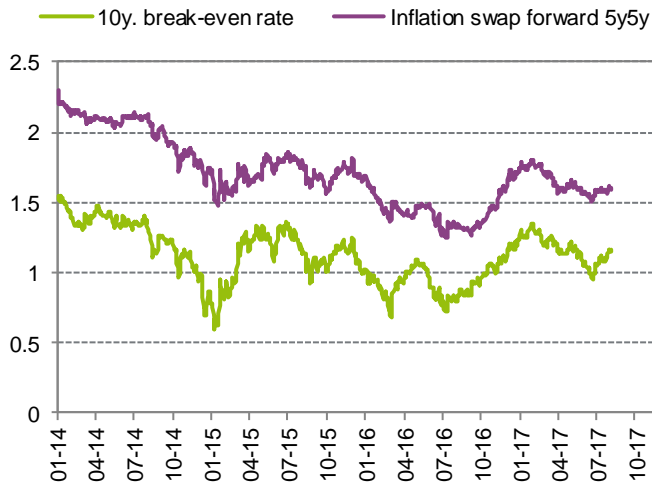
Since January 2<sup>nd</sup>, 2017



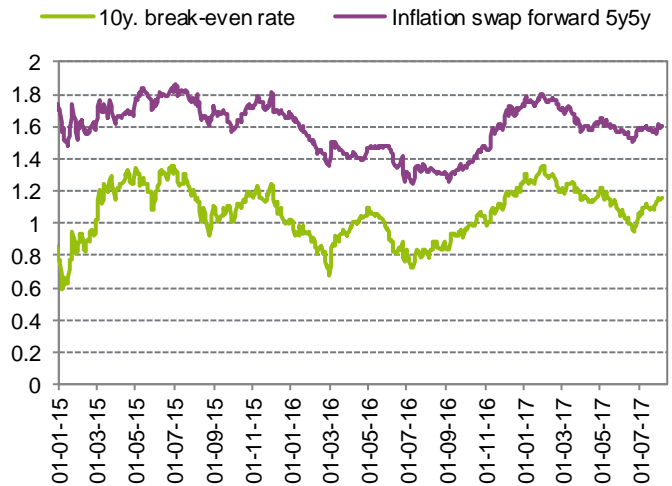
Source: Datastream, Amundi Research

**Inflation expectations channel**

**> Inflation expectations in the Eurozone**



Source: Datastream, Amundi Research



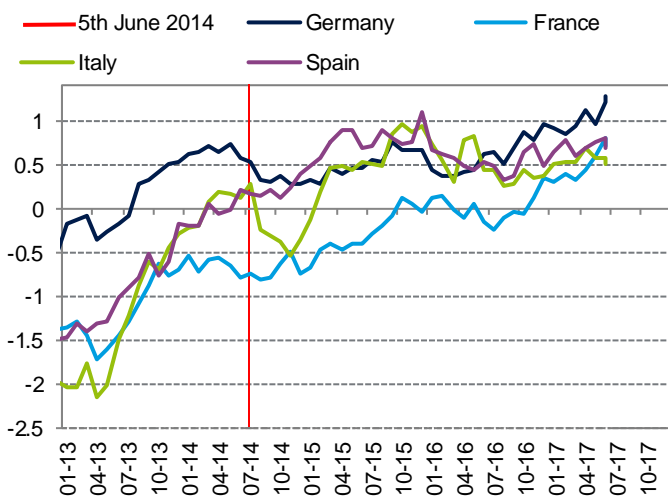
Source: Datastream, Amundi Research

**Confidence channel**

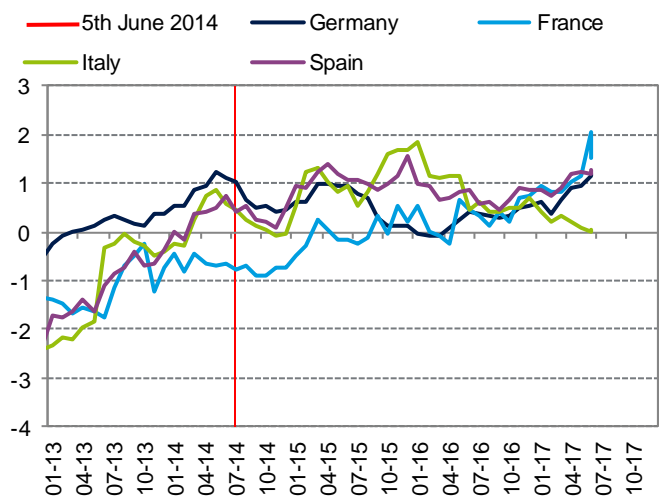
**Business climate**

**Consumer confidence**

*z-score since 1998*



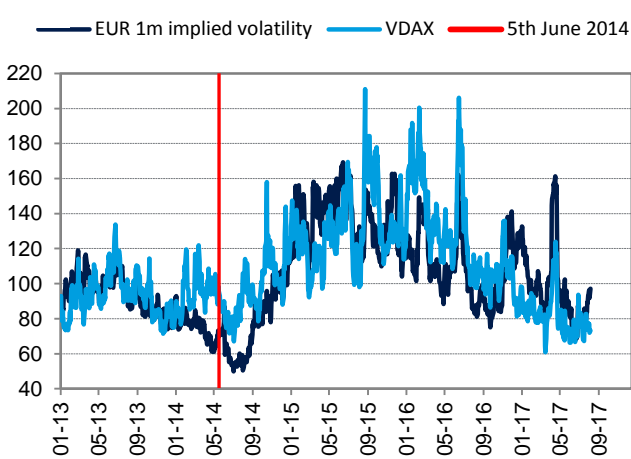
Source: Datastream, Amundi Research



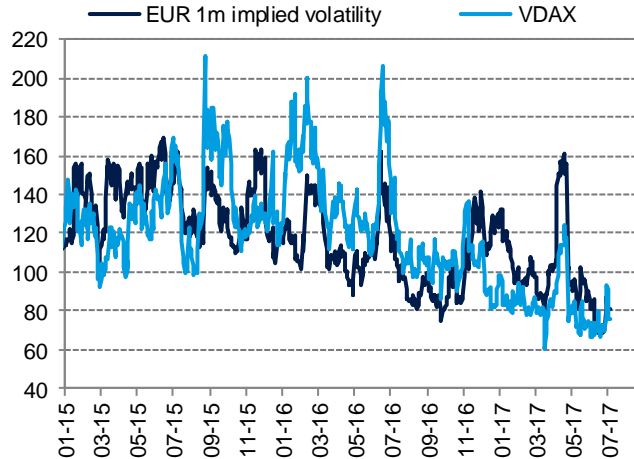
Source: Datastream, Amundi Research

**Financial stress channel**

**Implied volatility**

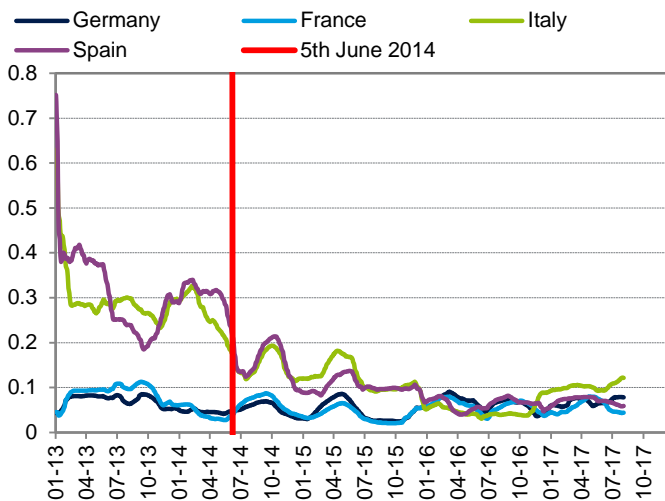


Source: Datastream, Amundi Research

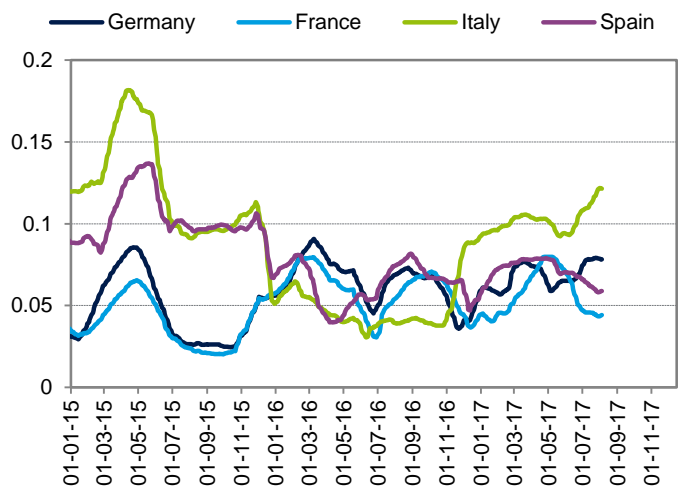


Source: Datastream, Amundi Research

**Historical volatility (120 days) on 2Yr sovereign bonds yields**



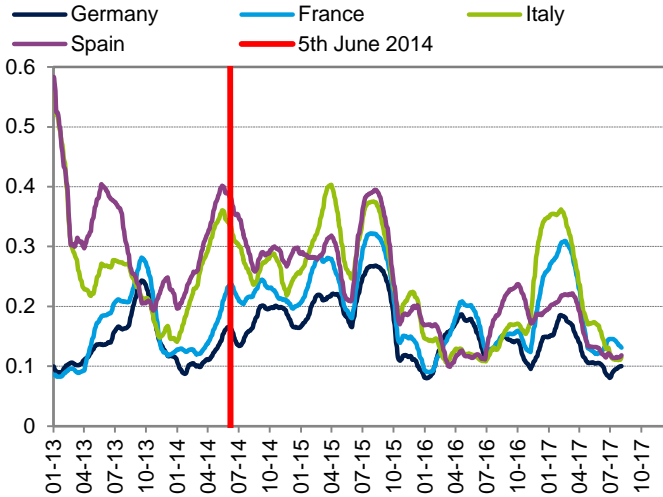
Source: Datastream, Amundi Research



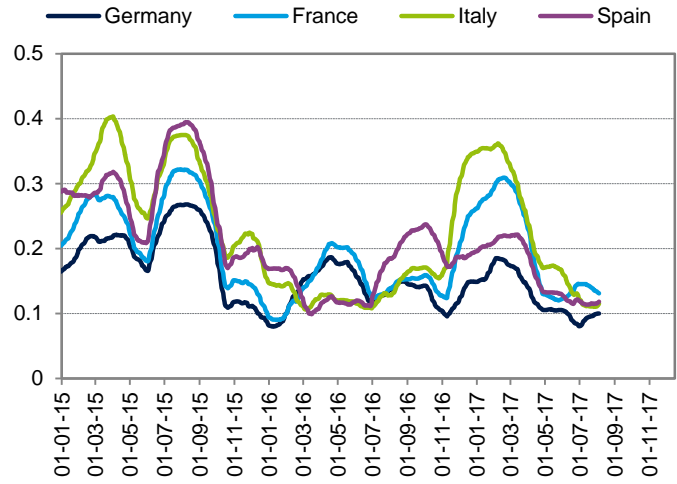
Source: Datastream, Amundi Research



**> Historical volatility (120 days) on 10Yr sovereign bonds yields**



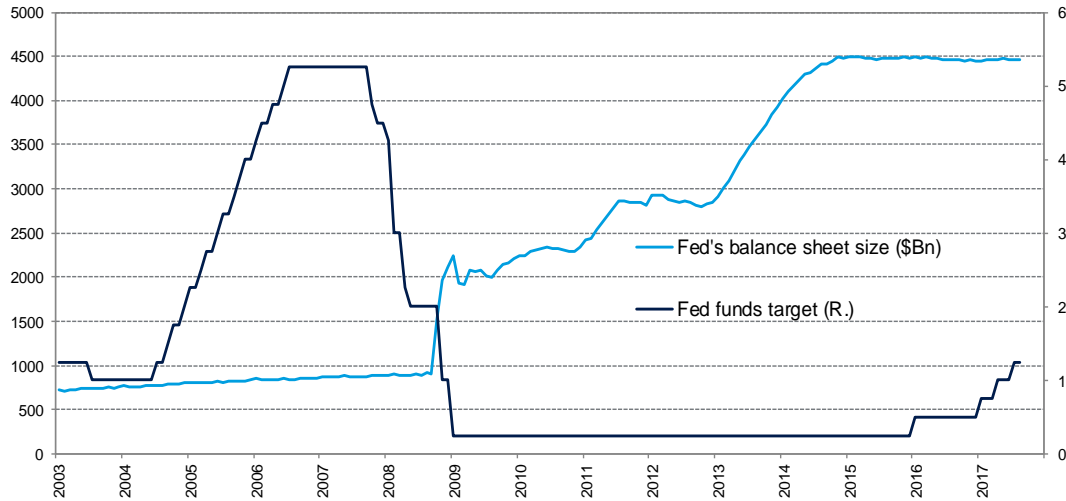
Source: Datastream, Amundi Research



Source: Datastream, Amundi Research

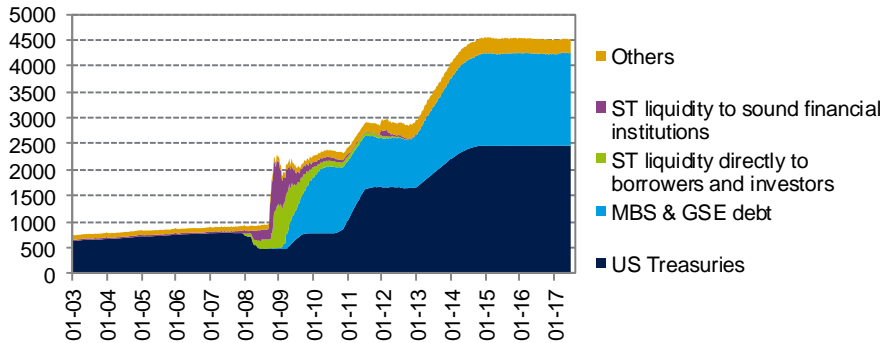
> **Fed's balance sheet**

**Fed's balance sheet size vs fed funds target**



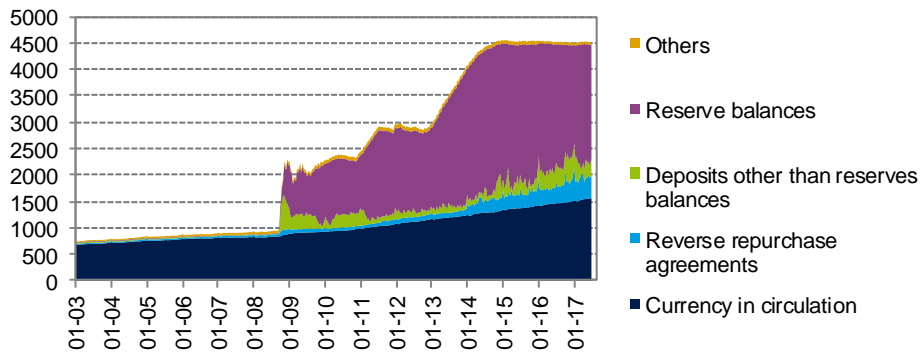
Source: Datastream, Amundi Research

**Fed: assets (in \$bn)**



Source: Datastream, Amundi Research

**Fed: liabilities (in \$bn)**



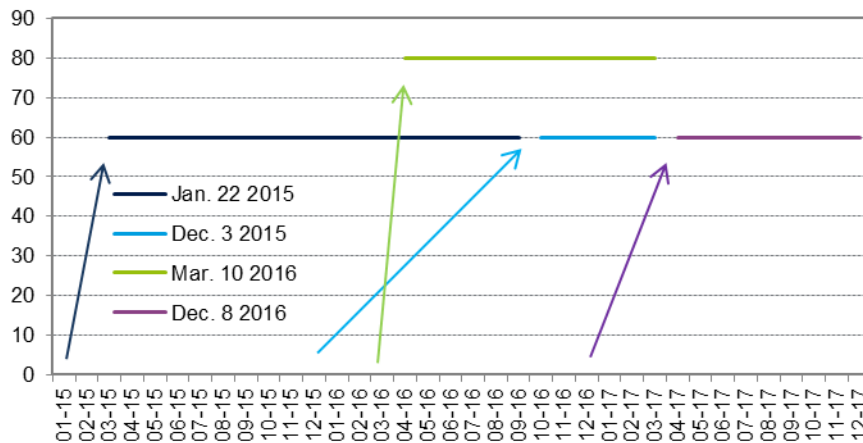
Source: Datastream, Amundi Research

**Appendix**

**Six important dates to have in mind**

- June 5, 2014: Mario Draghi announces the ECB wants to expand its balance sheet to the 2012 level. Negative deposit rates and the launch of a TLTRO programme are also announced.
- January 22, 2015: the ECB decides to launch an expanded asset purchase program (sovereign QE).
- March 9, 2015: the expanded APP turns effective. The ECB starts buying sovereign bonds.
- December 3, 2015: the ECB announces that the QE is extended until March 2017 and that the PSPP is extended to local and regional governments' debt securities. Maturing assets held by the Eurosystem will be reinvested "as long as necessary". The deposit rate is cut to -0.30%.
- March 10, 2016: the ECB increases the monthly purchases from €60 to 80 bn (the termination date becomes March 2017). The expanded APP is extended to corporate bonds issued by investment grade non-financial corporations (CSPP). The deposit rate is cut to -0.40%.
- December 8, 2016: the ECB announces it extends the QE until the end of December 2017 but at a monthly pace of €60bn from April to December. The ECB announces it would increase the programme in terms of size and/or duration "if financial conditions become inconsistent with further progress towards a sustained adjustment of the path of inflation. The maturity range for the PSPP is enlarged (from 1 to 31 years) and purchases with a yield to maturity below the deposit rate will be permitted.

**ECB's QE: decisions to change the monthly pace**



Source: , Amundi Research

> **Implementation** seems like a simple matter, at least in principle. The ECB will nonetheless be faced with the challenge of purchasing €60 bn in securities each month in illiquid markets that are short of willing sellers. QE encourages market players to buy or hold on to assets rather than selling them. Meanwhile, the banks, which are major holders of government debt, retain these assets in portfolios for regulatory purposes or simply out of liquidity considerations, as the securities can be used as collateral. Given this backdrop, unless there is an explosion in issuance by governments, a rapid change in regulators' policy or "forced" sales by public funds (is this not what Japan demanded of public pension funds?), the ECB's drive to establish this program will inevitably run into the realities of the market, which will undoubtedly push down short and long-term interest rates even further.

> We have already alluded to the importance of transmitting QE to the real economy. Several transmission channels will have to be activated in order for growth to be revived:

- An **"exchange rate effect"**: any currency depreciation would contribute to competitiveness and/or help restore business margins and/or lead to natural profit growth;

- An **"interest rate effect"**: any additional drop in interest rates would improve the creditworthiness of indebted entities and offer (potential) support to bank lending;

- A **"banking credit effect"**;

- A **"spread effect"**: the same impact as lower interest rates;

- A **"wealth effect"**: growth in the equity and real estate markets would elevate the wealth of market players, both consumers and investors;

- An **"inflation anticipation effect"**: the ECB's intention is to stop the deflationary spiral, as lower prices mean lower consumption;

- A **"confidence effect"**: without confidence, it will be difficult for growth to take off.

> **Lexicon :**

- **PSPP** : Public Sector Purchase Programme;

- **APP** : Asset Purchase Programme;

- **CSPP** : Corporate Sector Purchase Programme;

- **CBPP** : Covered Bond Purchase Programme;

- **SMP** : Security Market Programme;

- **ABSPP** : Asset Back-Backed Securities Purchase Programme.

## QE MONITOR

### Research, Strategy and Analysis

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