

ECB QE Monitor – July 04, 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 € 1919 bn of assets under the expanded APP since March 2015, including € 1609 bn under the Public Sector purchase Programme (PSPP) and € 97 bn under the Corporate Sector Purchase Programme (CSPP), and still has to buy € 360 bn of assets until December 2017.

> **Key points for this month:**

- **For the third month in a row, the share of German securities purchased under the PSPP has been below Germany's capital key weight.** The share of French, Italian, Belgian and Austrian securities stabilized clearly above the capital key weight of their respective countries. **The deviation from the capital key rule remained roughly stable.**
- The share of Portuguese securities purchased under the PSPP remains strikingly stable, far below Portugal's capital key weight.
- **In June, the average maturity of German purchases rebounded but reached only 5.3 years. It fell dramatically to 5.1 years for Dutch securities and 4.6 years for Finnish securities. On the contrary, the average maturity of supranational bonds climbed to 13.2 years.**
- **The APP slowed markedly during the last week of June, mostly for the PSPP.**
- In June, only 9% of CSPP purchases have been done on the primary market.
- The total amount of assets purchased by the Eurosystem for monetary policy purposes (expanded APP and previous programmes, including SMP) accounts for more than €2 trn. The Eurosystem's balance sheet now accounts for €4.2 trn (38% of the Eurozone's GDP).
- There remains only six months of QE: the pressure on the Governing Council will increase during the summer.

ECB asset purchase programme



Assets bought under the expanded Asset Purchase Programme (APP) (30/06/2017)	
€191.3 bn	Third Covered Bond Purchase Programme (CBPP3)
€96.6 bn	Corporate Sector Purchase Programme (CSPP)
€24.4 bn	Asset-Backed Securities Purchase Programme (ABSPP)
€1609.3 bn	Public Sector Purchase Programme (PSPP)
84.2%	% of expanded APP implementation

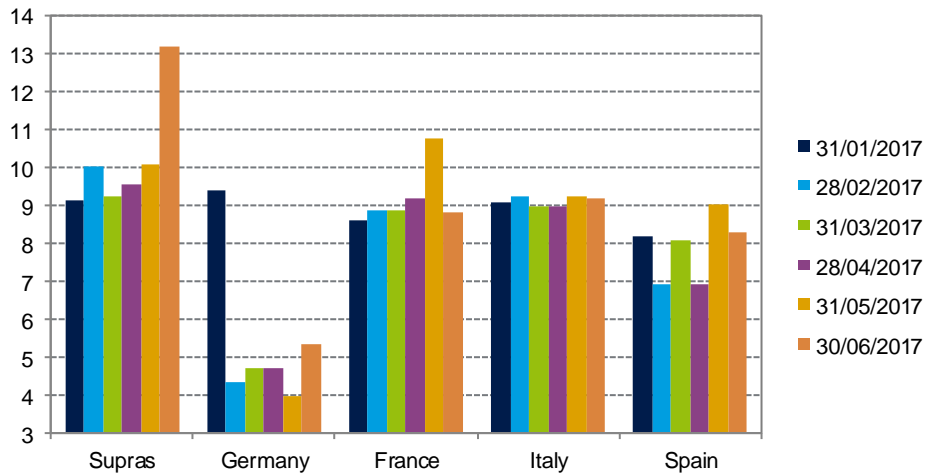


Assets bought under the PSPP

Assets bought under the PSPP (30 June 2017)		
Country	Holdings (€bn)	Weighted average remaining maturity
Germany	391.9	7.1
France	315.2	7.6
Italy	274.1	8.5
Spain	194.8	8.5
The Netherlands	87.8	7.6
Belgium	54.8	10.2
Austria	43.6	9.2
Portugal	28.1	8.9
Finland	25.5	7.2
Ireland	21.8	8.7
Slovakia	9.8	8.2
Slovenia	5.8	9.3
Luxembourg	2.1	5.7
Latvia	1.6	7.9
Lithuania	2.6	6.8
Malta	1.0	11.0
Cyprus	0.2	4.7
Estonia	0.1	1.0
Supranationals	177.9	7.4
Total		7.9

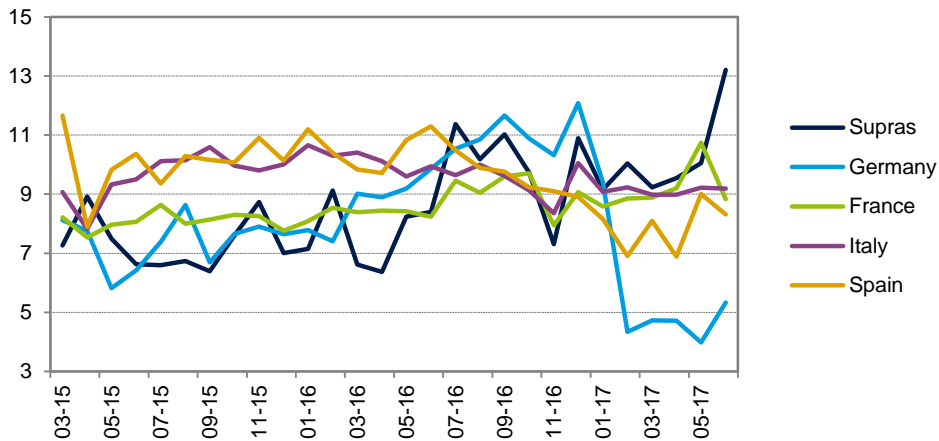
> **Maturity of PSPP purchases**

Average maturity of PSPP purchases (in years)



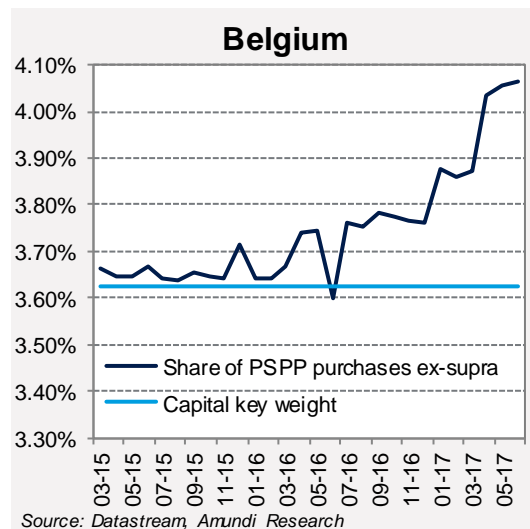
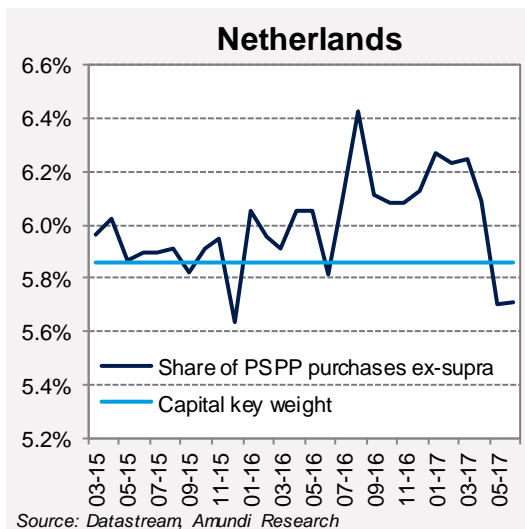
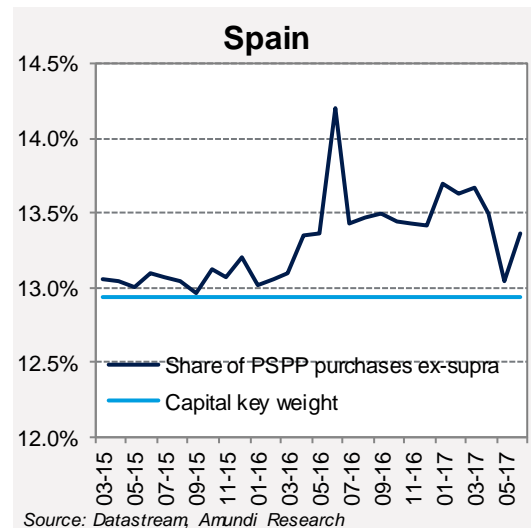
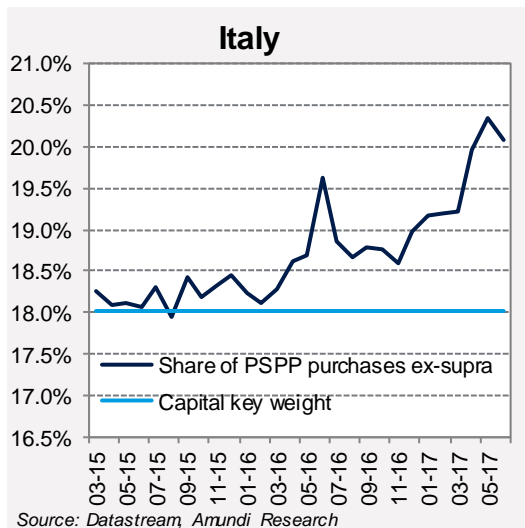
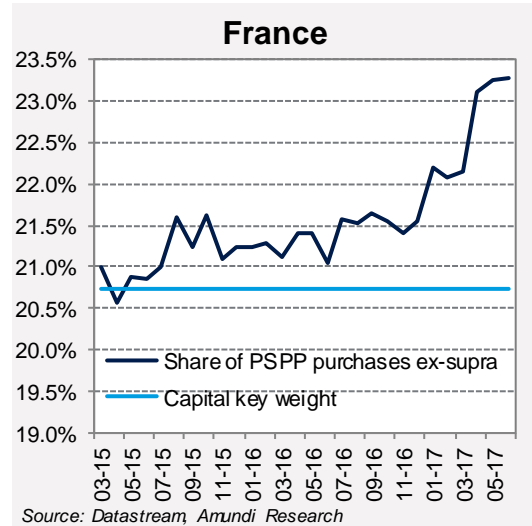
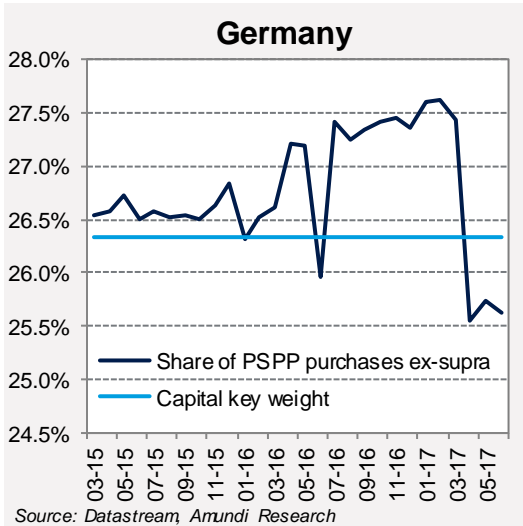
Source: Datastream, Amundi Research

Average maturity of PSPP purchases (in years)

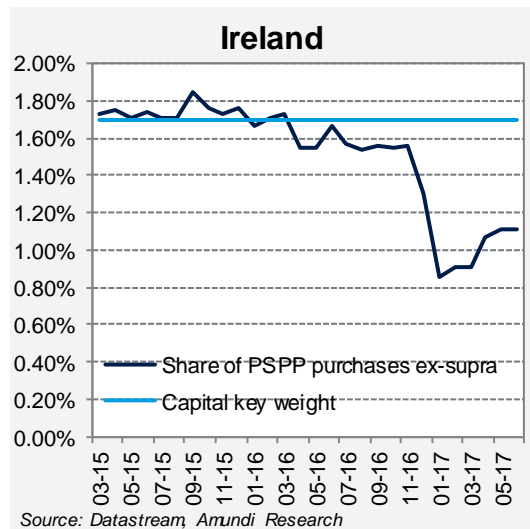
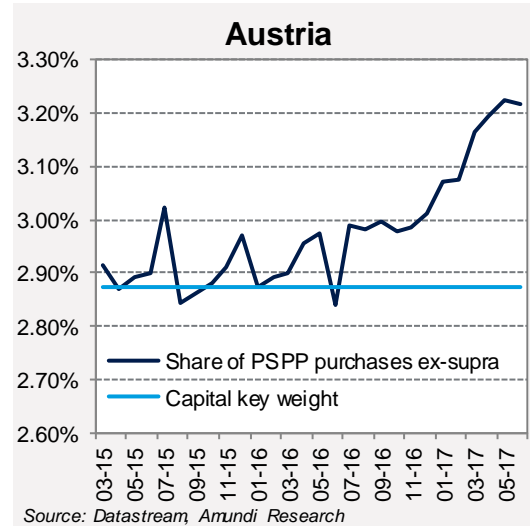
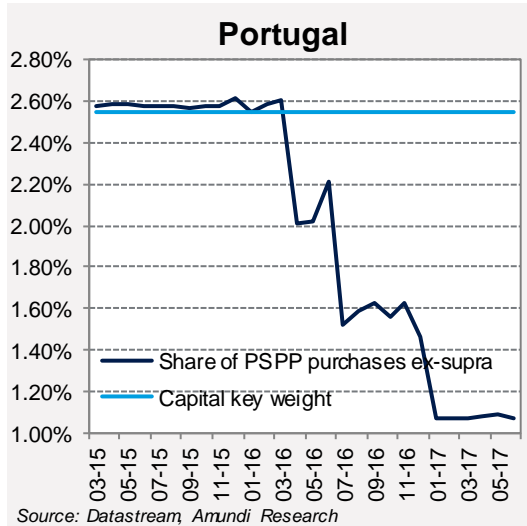


Source: Datastream, Amundi Research

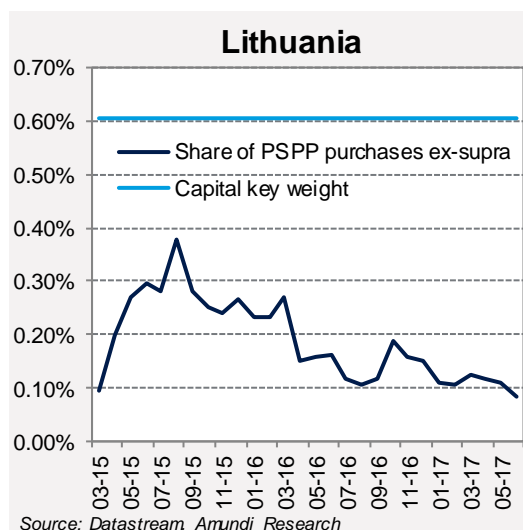
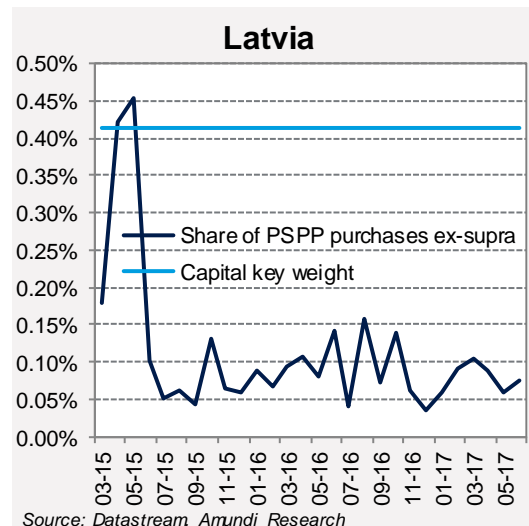
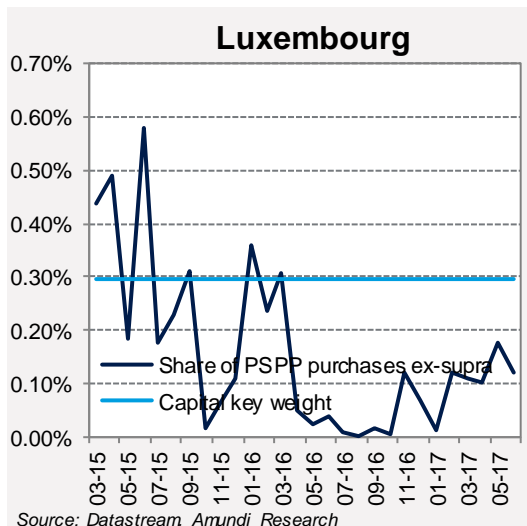
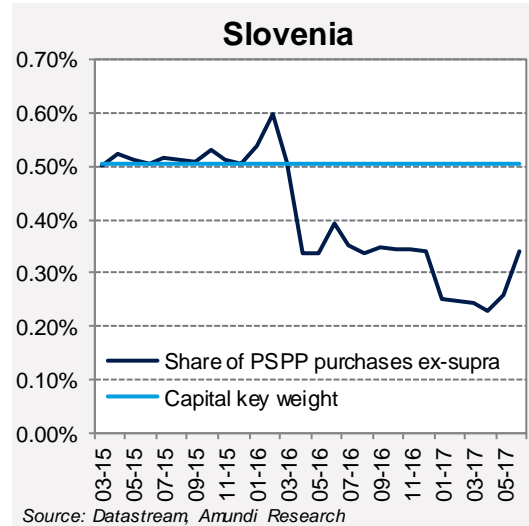
> **Breakdown of PSPP purchases by country (1/4)**



> **Breakdown of PSPP purchases by country (2/4)**

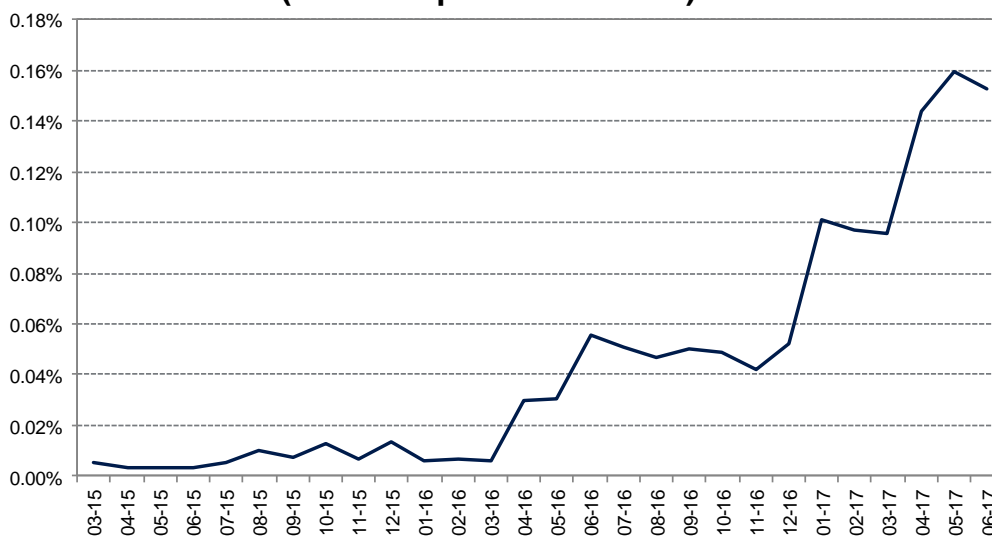


> **Breakdown of PSPP purchases by country (3/4)**



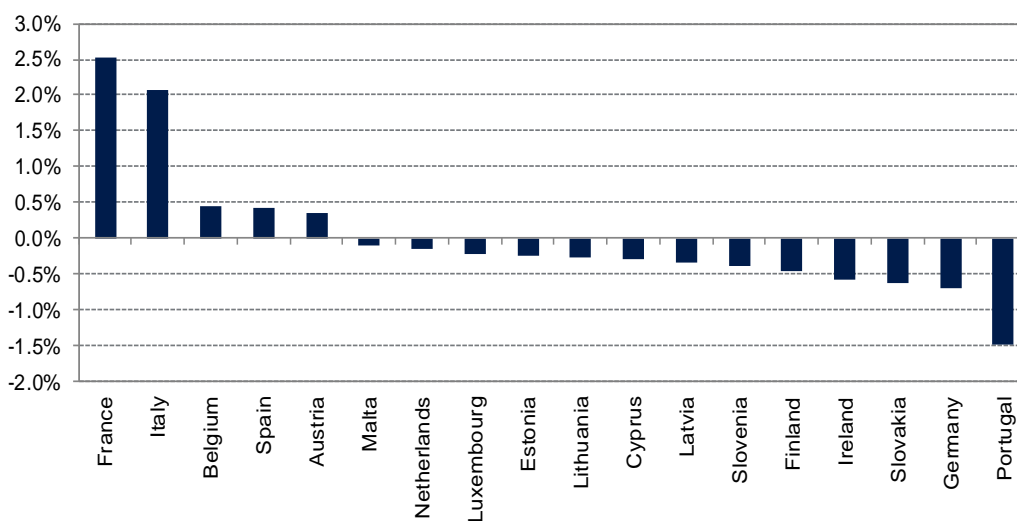
> **Breakdown of PSPP purchases by country (4/4)**

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



Source: Amundi Research

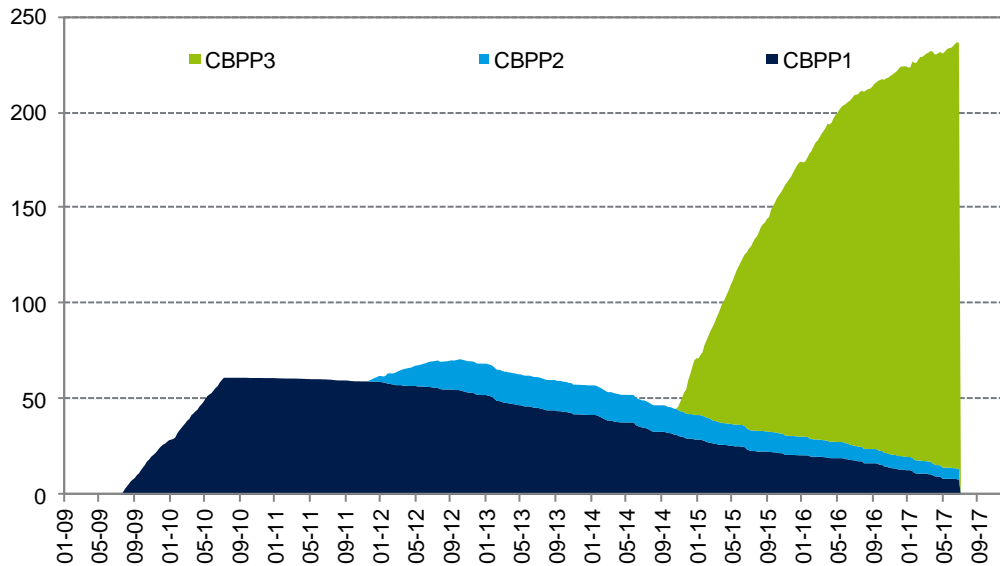
**Deviation from capital key rule in June 2017
(as % of total PSPP purchases ex-supra)**



Source: Datastream, Amundi Research

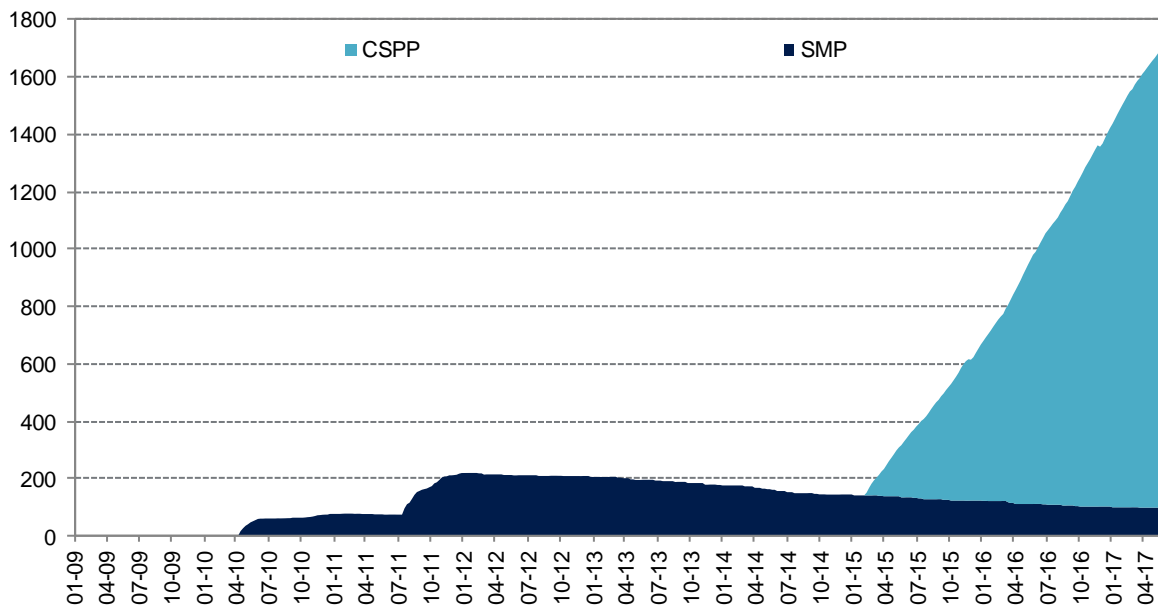
> **Asset purchase programme: CBPP, SMP and PSPP (outstanding, € bn)**

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



Source: Datastream, Amundi Research

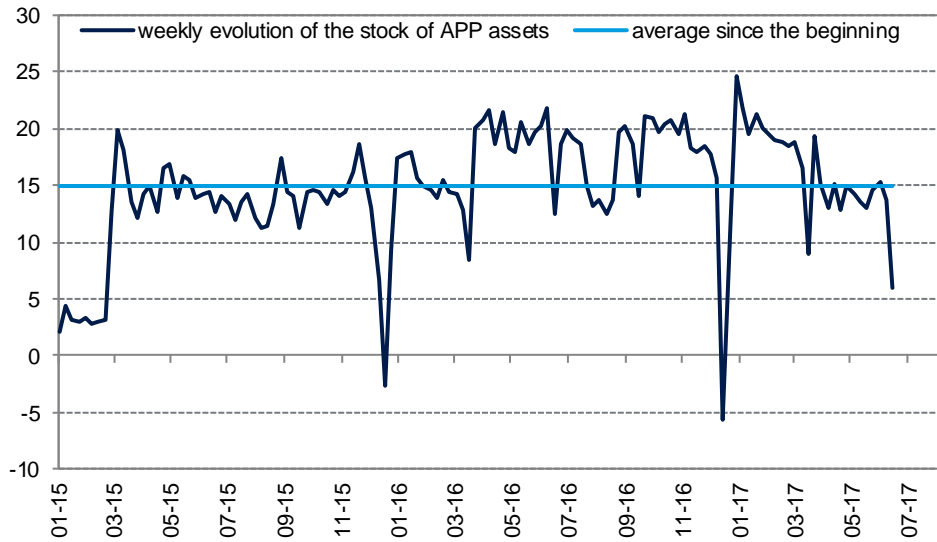
**Sovereign bonds purchased by the ECB
(outstanding €bn)**



Source: Datastream, Amundi Research

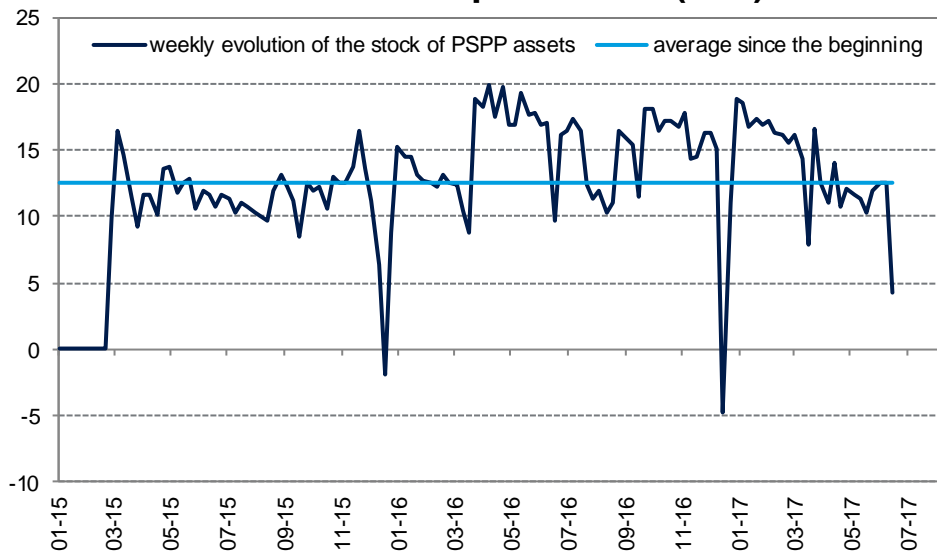
> Pace of APP purchases (weekly change of the stock, € bn) (1/2)

Pace of PSPP purchases (€bn)



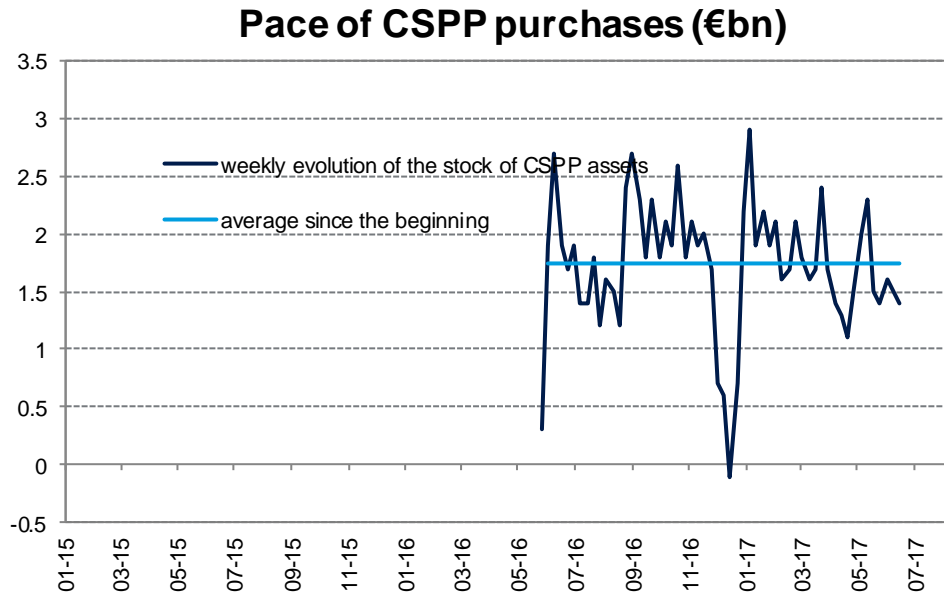
Source: Datastream, Amundi Research

Pace of APP purchases (€bn)



Source: Datastream, Amundi Research

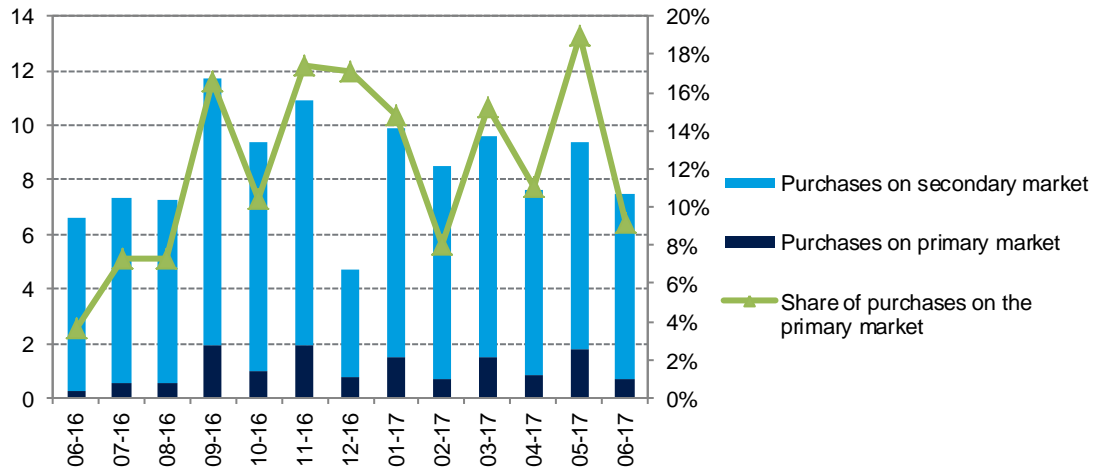
> **Pace of APP purchases (weekly change of the stock, € bn) (2/2)**



Source: Datastream, Amundi Research

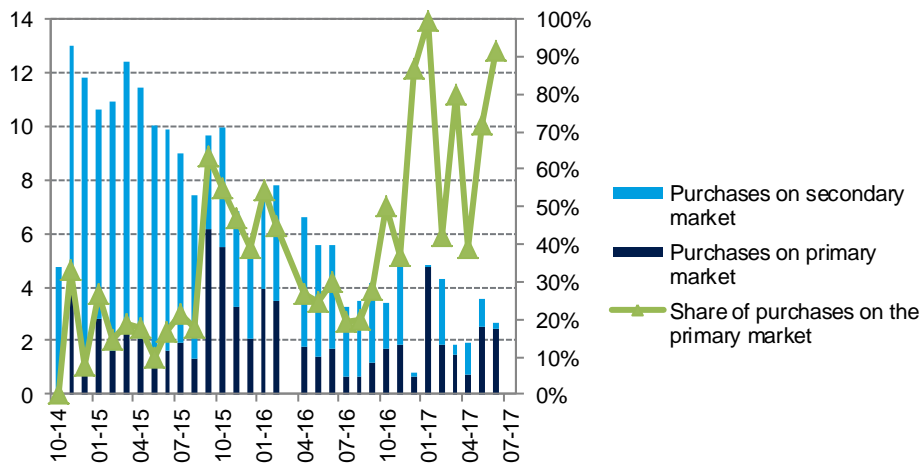
NB: ECB data take amortization adjustments into account. “The amortization emerges from an accounting principle that implies that securities purchased at prices below face value have to be revalued upwards over time towards maturity, and revalued downwards over time, if purchased at prices above face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

> Breakdown of CSPP monthly purchases



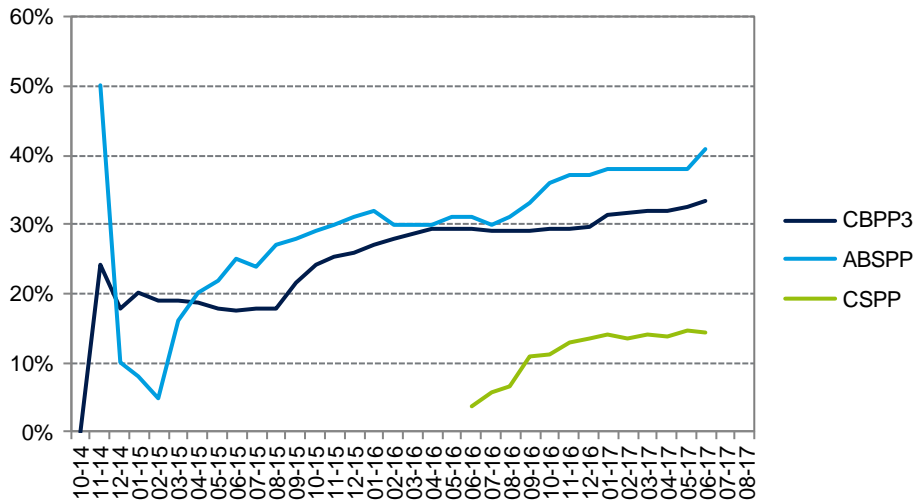
Source: Datastream, Amundi Research

> Breakdown of CBPP3 monthly purchases



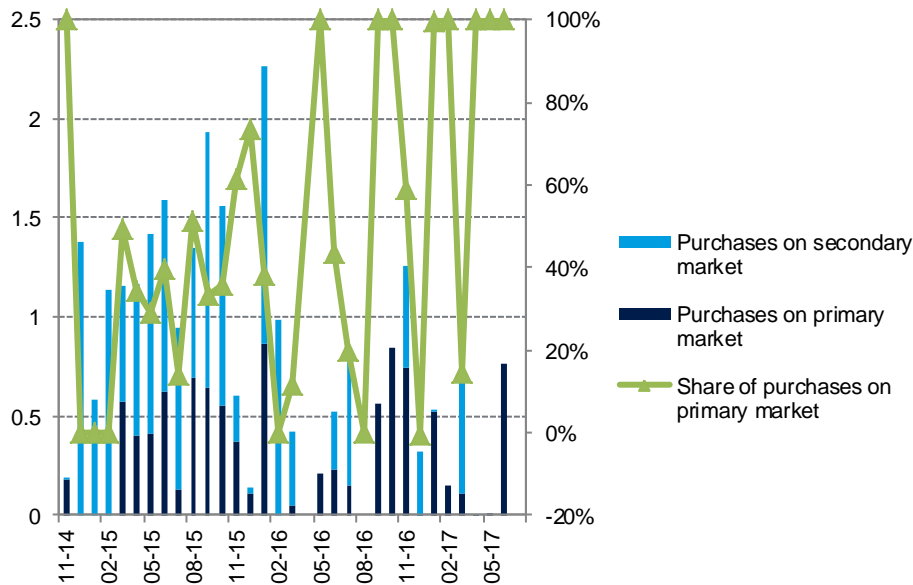
Source: Datastream, Amundi Research

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



Source: Datastream, Amundi Research

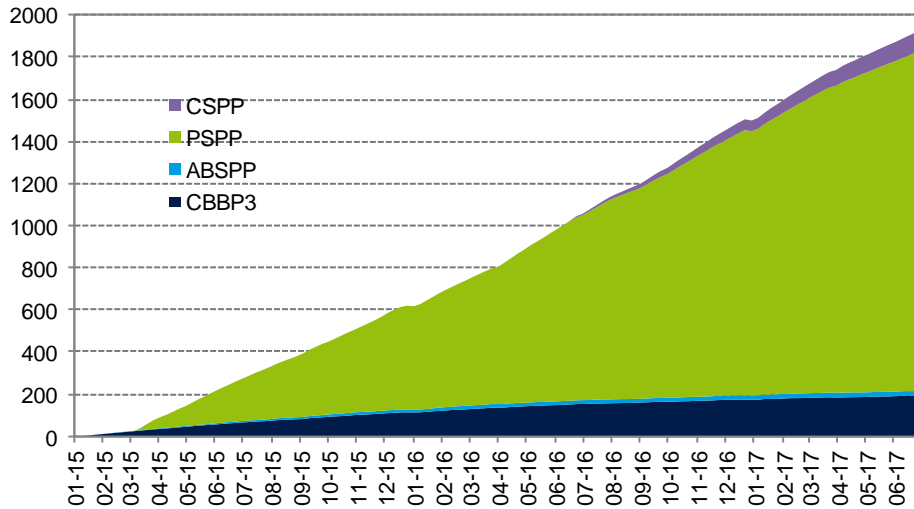
> **Breakdown of ABSPP monthly purchases**



Source: Datastream, Amundi Research

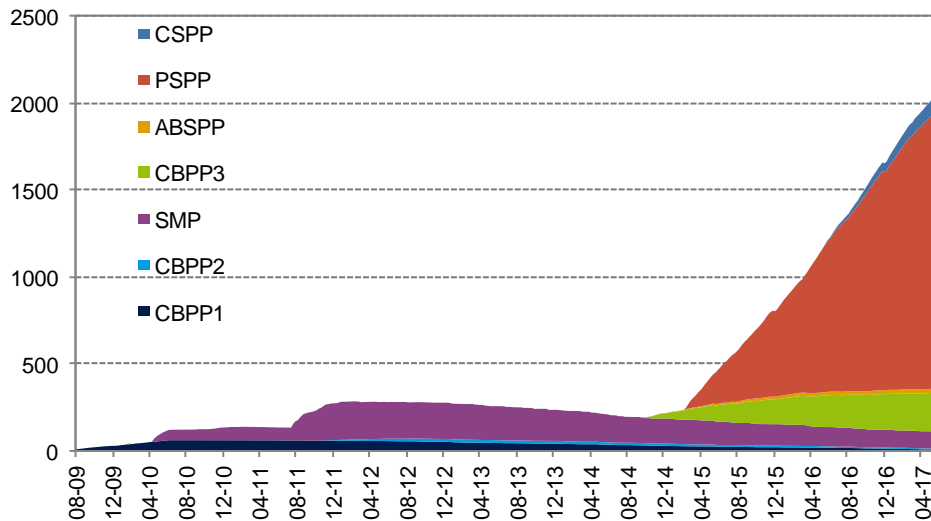
> **Eurosystem : Balance sheet (1/2)**

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



Source: Datastream, Amundi Research

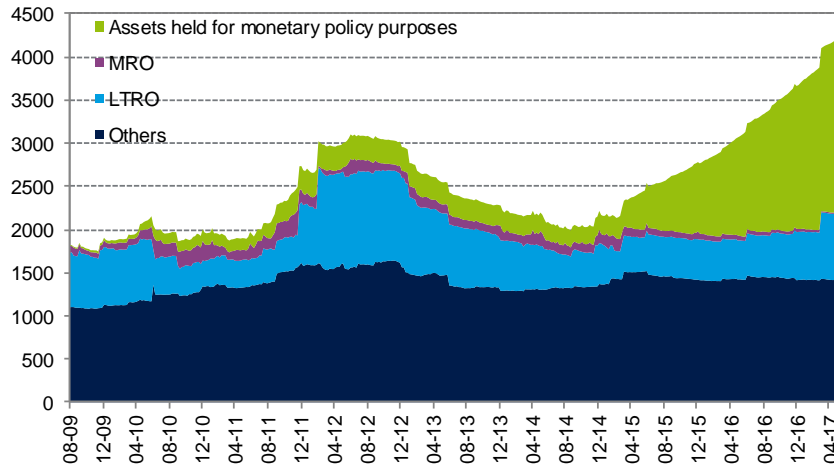
Assets held by the Eurosystem for monetary policy purposes (in €bn)



Source: Datastream, Amundi Research

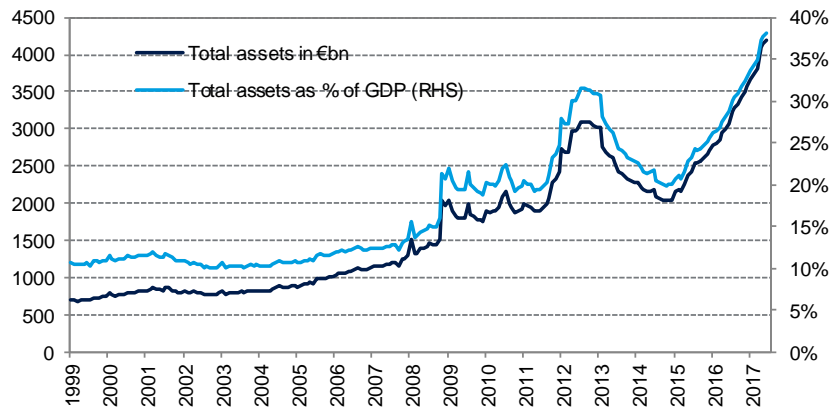
> Eurosystem : Balance sheet (2/2)

Eurosystem: total assets (in €bn)



Source: Datastream, Amundi Research

Eurosystem: total assets



Source: Datastream, Amundi Research

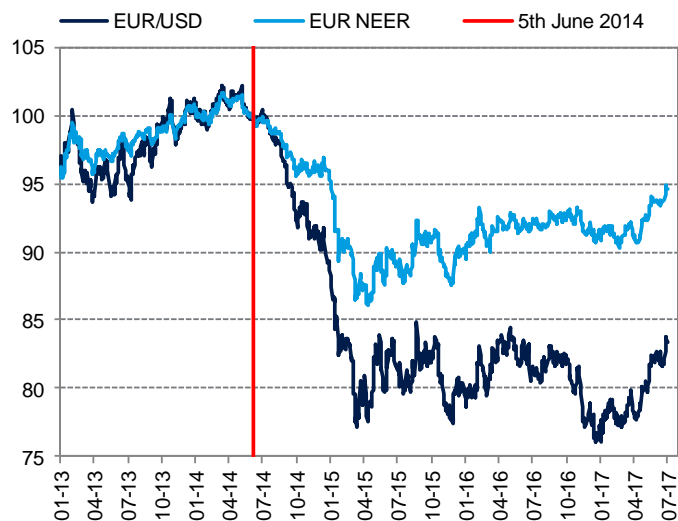
Eurosystem : excess reserves (€bn)



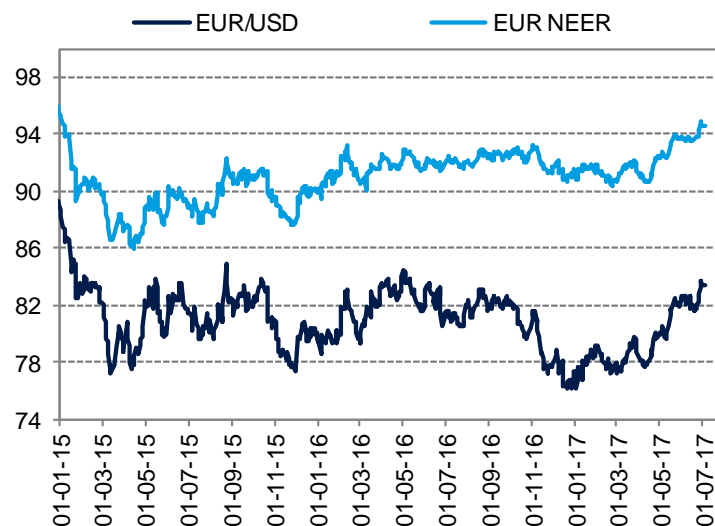
Source: Datastream, Amundi Research

FX channel

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



Source: Datastream, Amundi Research



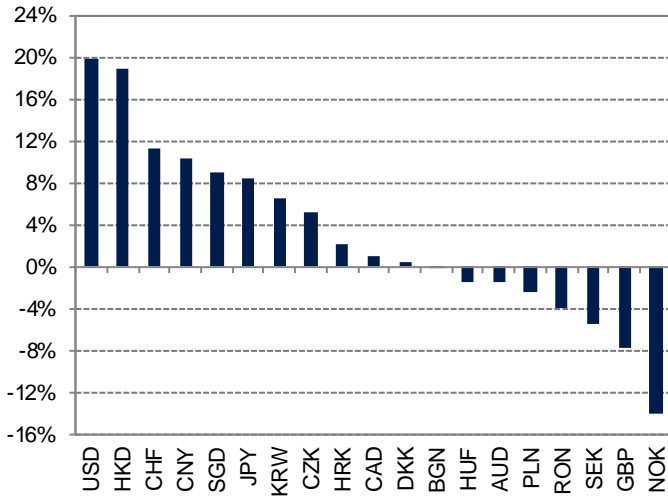
Source: Datastream, Amundi Research

> Evolution of the euro vs. ...

Since January 2nd, 2017

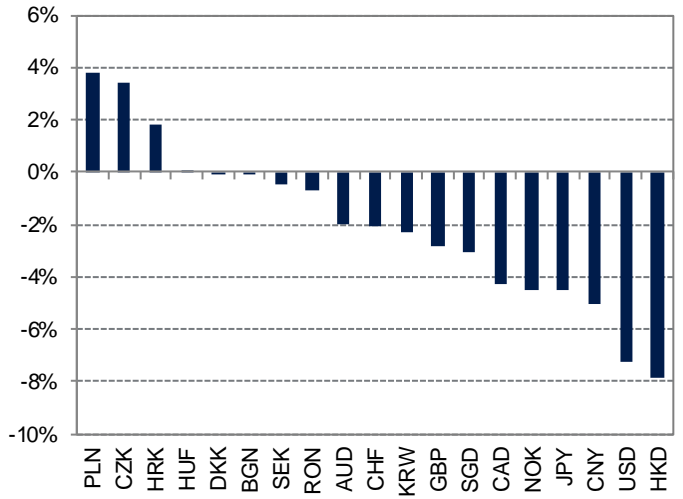
	Weight in effective euro	02/01/2017	04/07/2017	Variation
EUR/CNY	18.7	7.33	7.72	5.3%
EUR/USD	16.8	1.05	1.14	7.8%
EUR/GBP	14.8	0.85	0.88	2.9%
EUR/JPY	7.2	123.02	128.81	4.7%
EUR/CHF	6.4	1.07	1.09	2.1%
EUR/PLN	6.3	4.40	4.24	-3.7%
EUR/CZK	5.0	27.02	26.13	-3.3%
EUR/SEK	4.7	9.58	9.63	0.5%
EUR/KRW	3.9	1273.93	1303.68	2.3%
EUR/HUF	3.2	308.87	308.77	0.0%
EUR/DKK	2.7	7.44	7.44	0.0%
EUR/RON	2.0	4.54	4.57	0.7%
EUR/CAD	1.6	1.41	1.48	4.4%
EUR/HKD	1.6	8.18	8.88	8.5%
EUR/SGD	1.5	1.52	1.57	3.1%
EUR/NOK	1.4	9.08	9.51	4.7%
EUR/AUD	0.9	1.46	1.49	2.0%
EUR/HRK	0.6	7.56	7.42	-1.8%
EUR/BGN	0.6	1.96	1.96	0.0%
Effective EUR	100.0	94.0	97.5	3.7%

Since June 5, 2014



Source: Datastream, Amundi Research

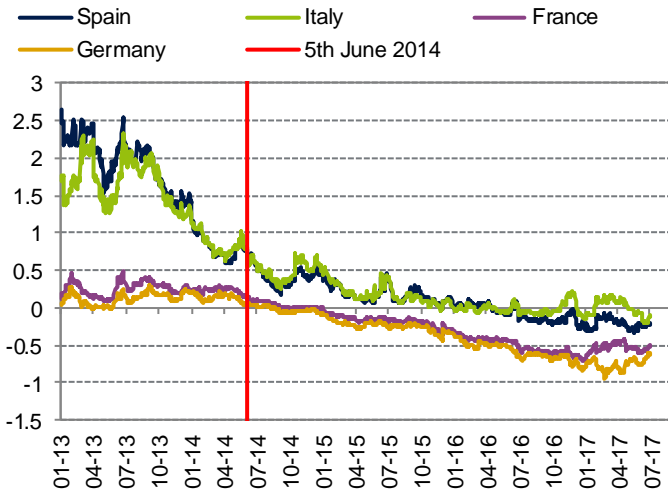
Since January 2nd, 2017



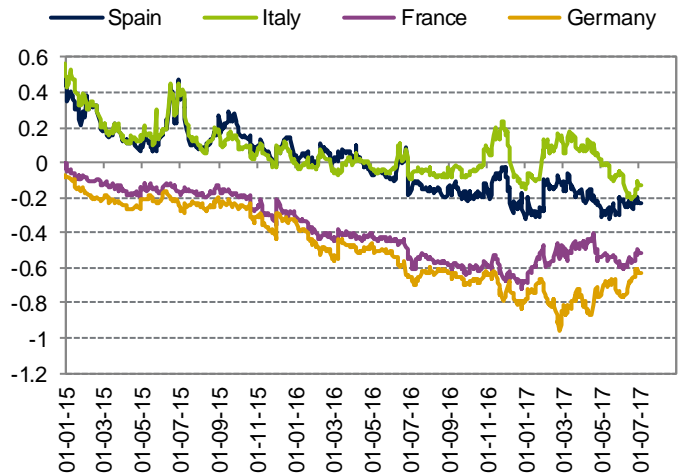
Source: Datastream, Amundi Research

Interest rate channel

> 2Yr sovereign bonds

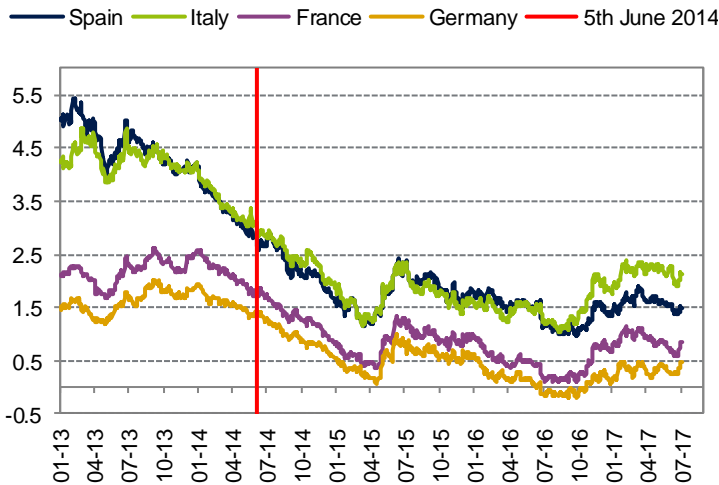


Source: Datastream, Amundi Research

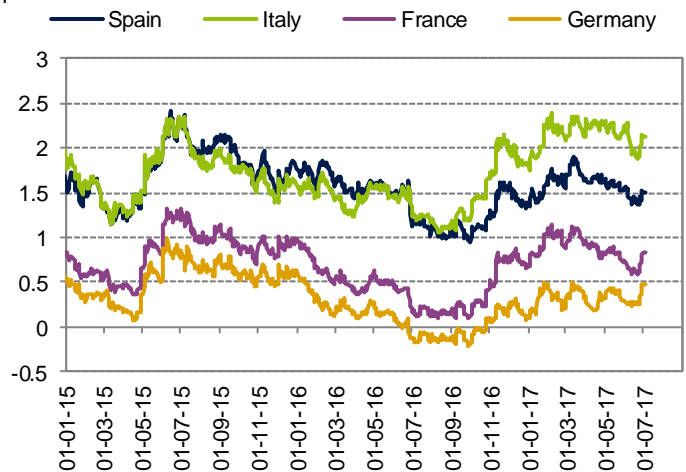


Source: Datastream, Amundi Research

> 10Yr sovereign bonds



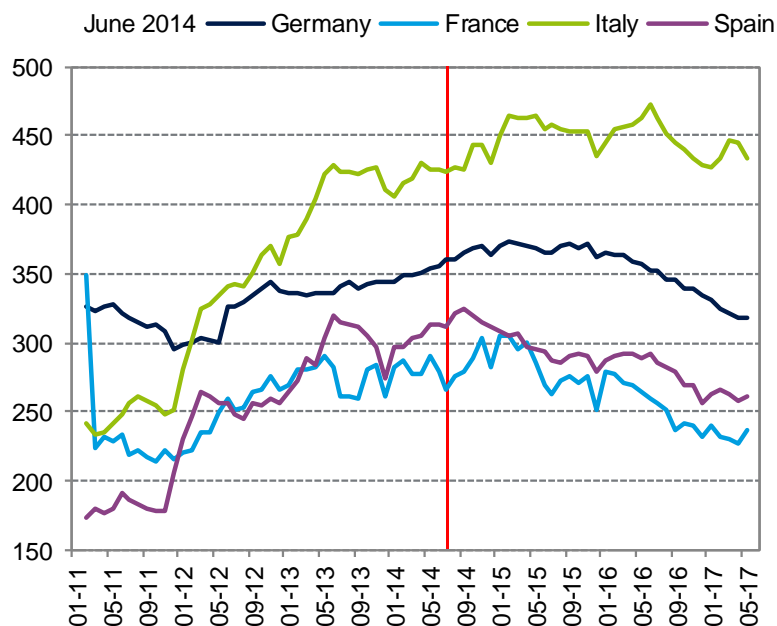
Source: Datastream, Amundi Research



Source: Datastream, Amundi Research

	2 year		10 year	
	05/06/2014	04/07/2017	05/06/2014	04/07/2017
Germany	0.05	-0.63	1.42	0.48
France	0.12	-0.52	1.80	0.83
Italy	0.67	-0.13	3.05	2.13
Spain	0.68	-0.24	2.83	1.51
Netherlands	0.14	-0.56	1.67	0.67
Belgium	0.14	-0.49	1.92	0.82
Ireland	/	/	2.57	0.89
Greece	/	/	6.22	5.35
Portugal	1.13	0.11	3.64	3.01
Austria	0.14	-0.47	1.59	0.65

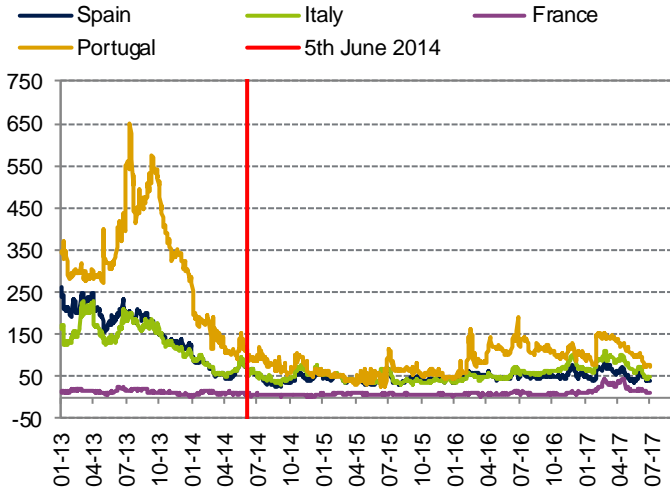
▼ Sovereign debt: banks holdings (€ bn)



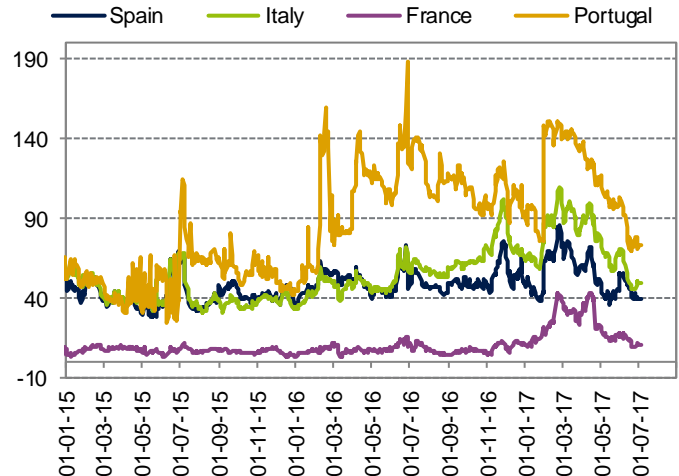
Source: Datastream, Amundi Research

Spreads channel

> 2Yr sovereign spreads

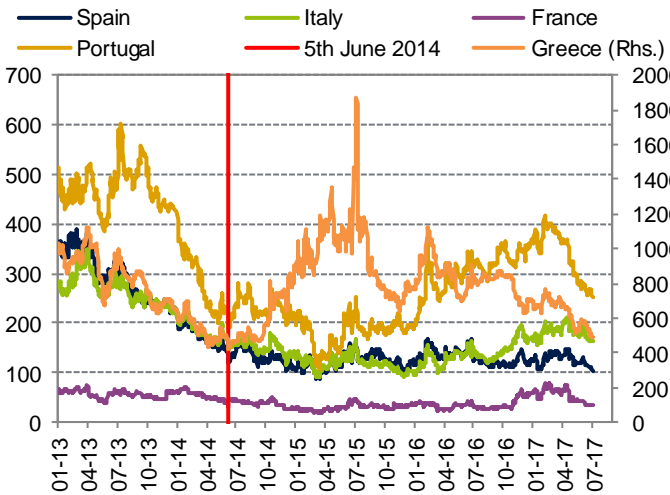


Source: Datastream, Amundi Research

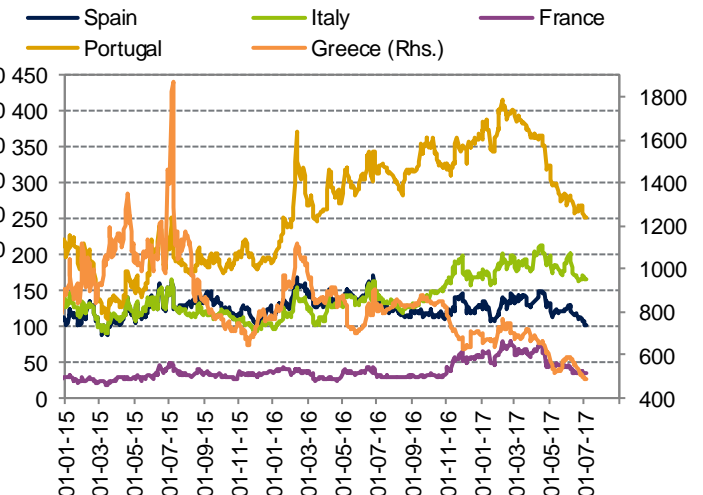


Source: Datastream, Amundi Research

> 10Yr sovereign spreads



Source: Datastream, Amundi Research

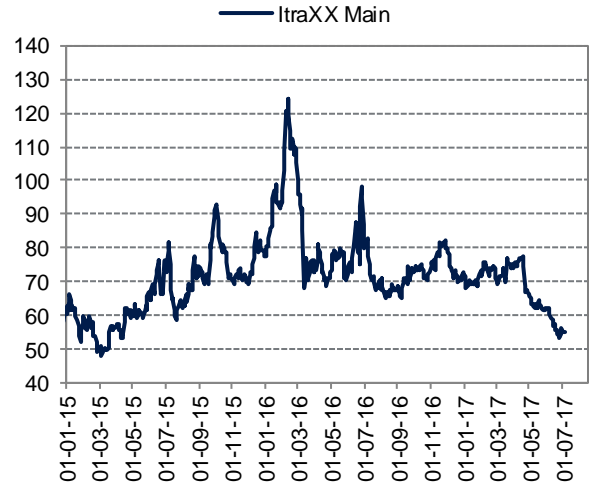


Source: Datastream, Amundi Research

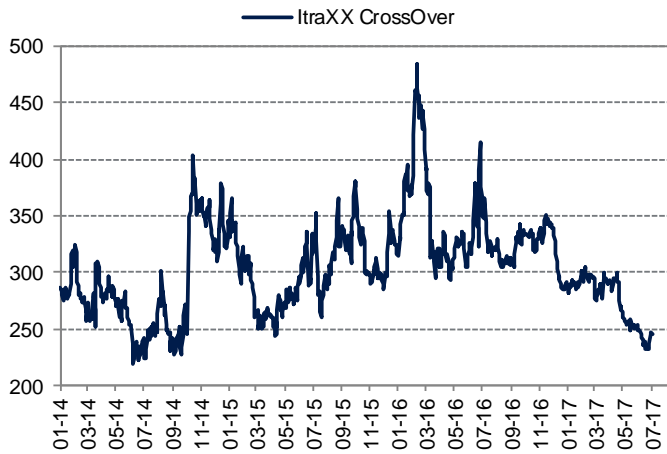
> ItraXX Indices



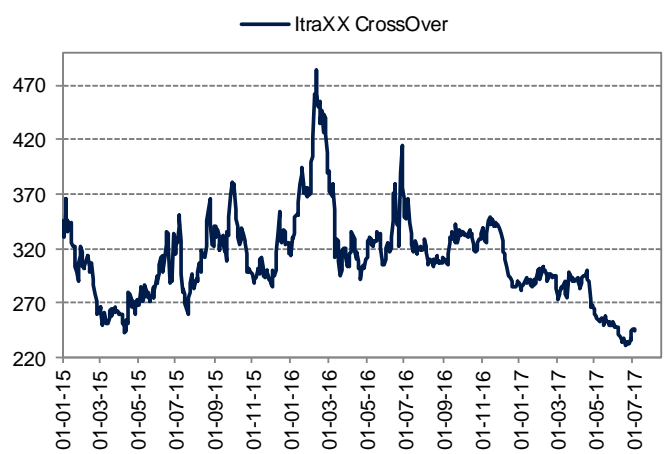
Source: Datastream, Amundi Research



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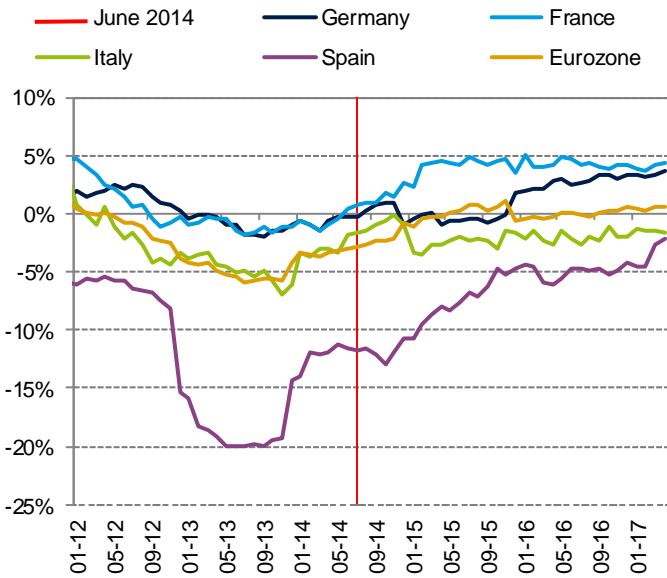


Source: Datastream, Amundi Research

Banking credit channel

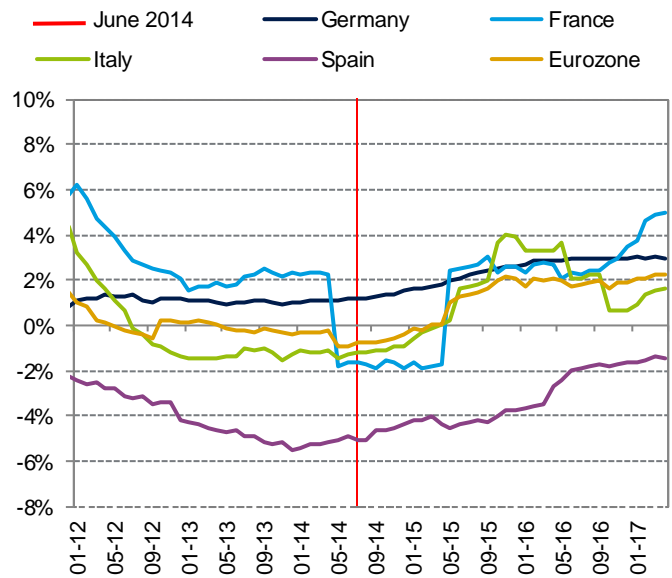
> Bank loans (YoY)

To non-financial corporations



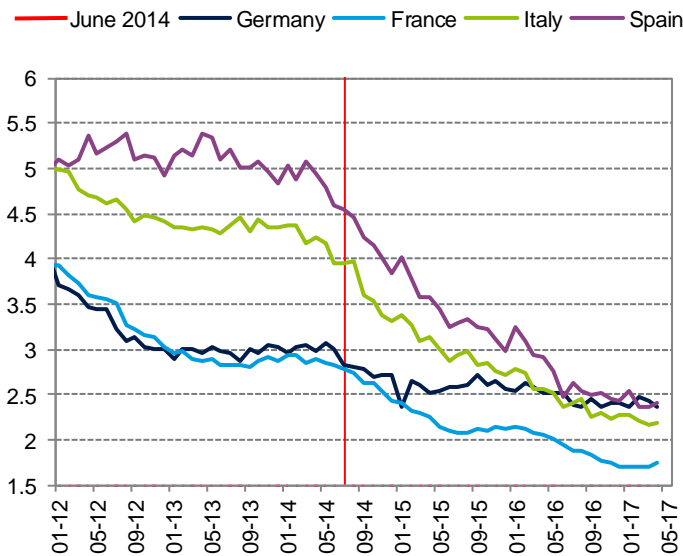
Source: Datastream, Amundi Research

To households



Source: Datastream, Amundi Research

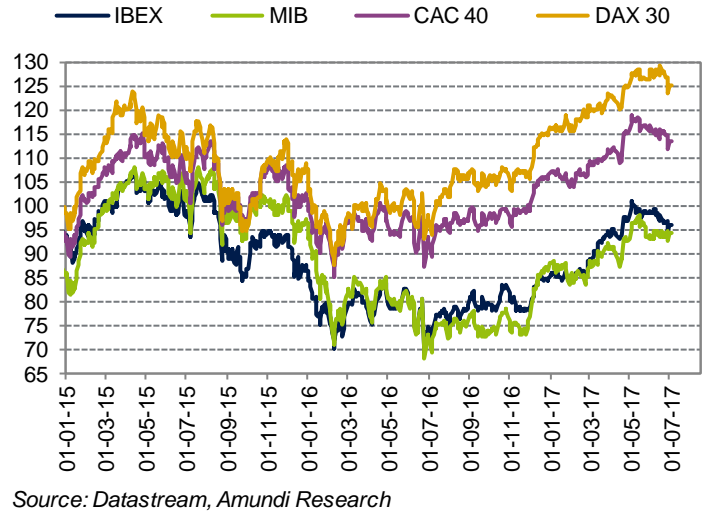
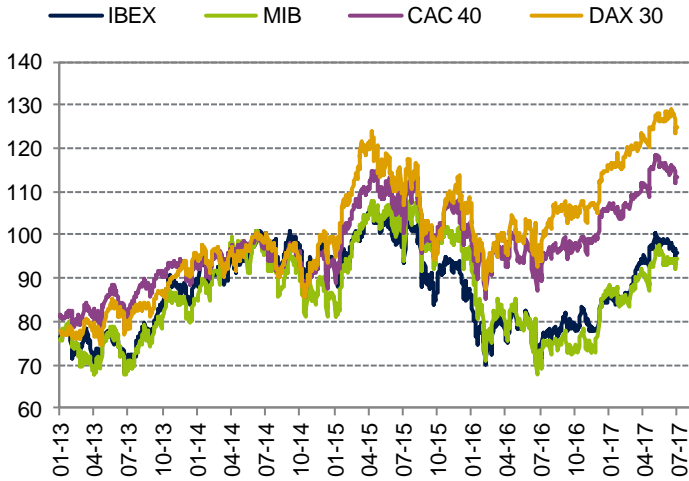
> Interest rates on new loans to SMEs (< € 1 million)



Source: Datastream, Amundi Research

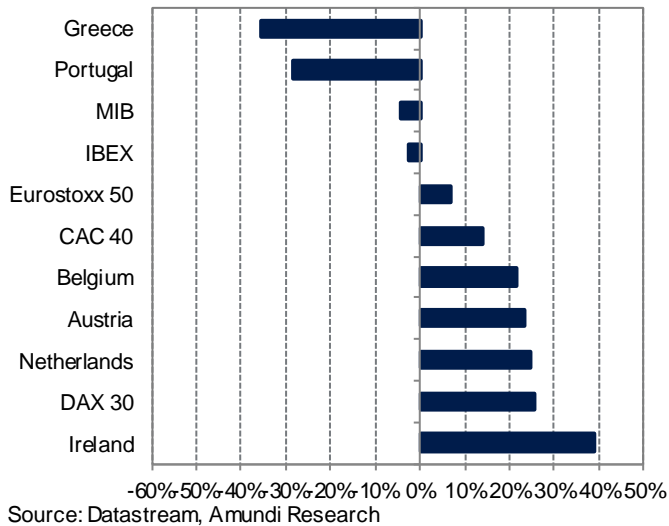
Wealth effect channel

> Equities

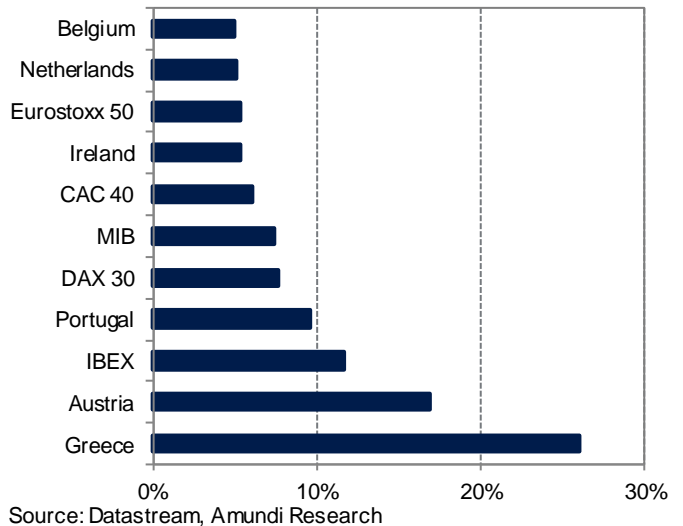


> Performances

Since June 5, 2014

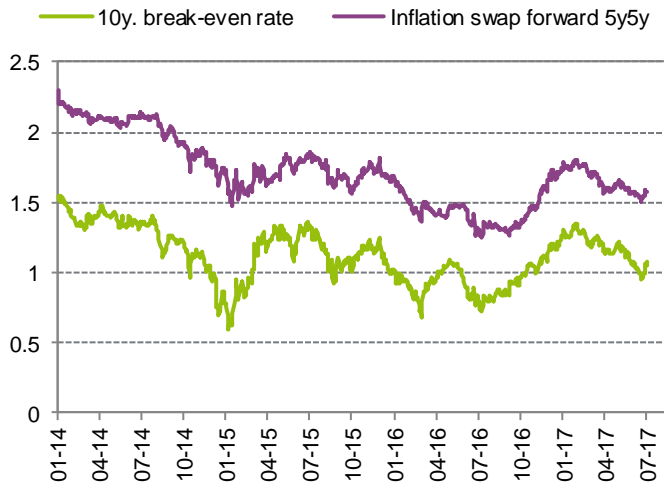


Since January 2nd, 2017

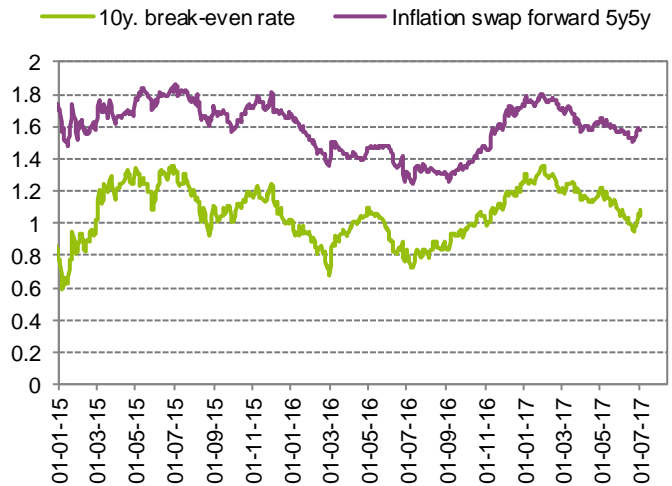


Inflation expectations channel

> Inflation expectations in the Eurozone



Source: Datastream, Amundi Research



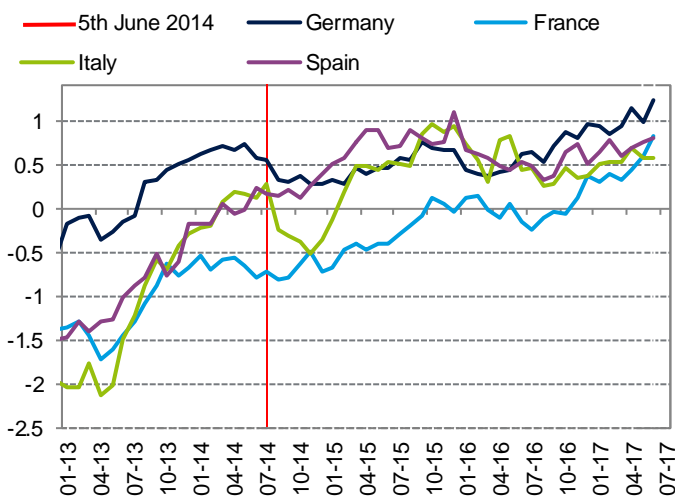
Source: Datastream, Amundi Research

Confidence channel

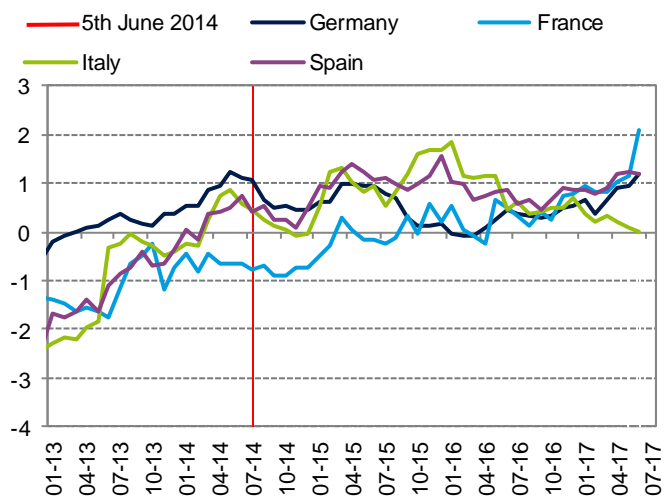
Business climate

Consumer confidence

z-score since 1998



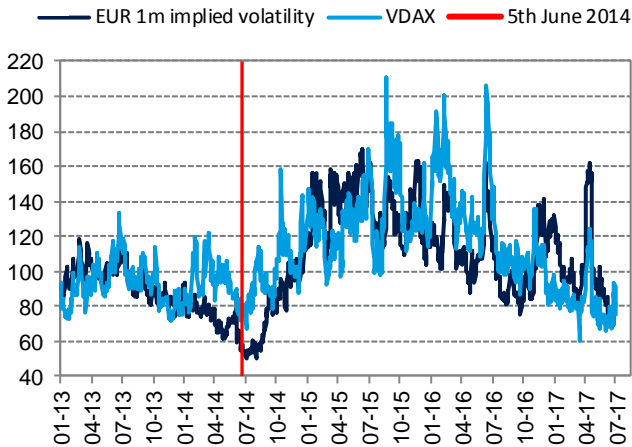
Source: Datastream, Amundi Research



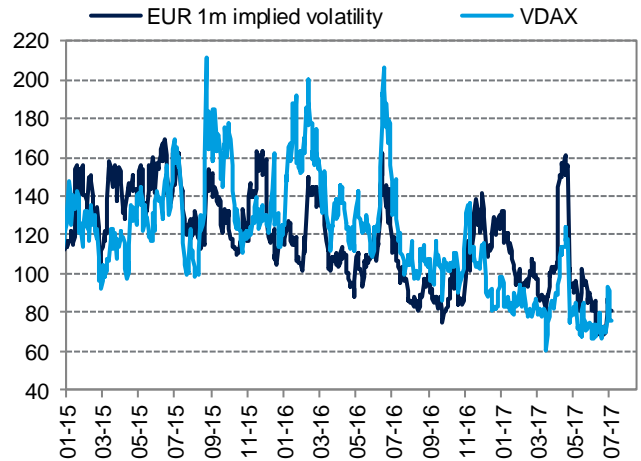
Source: Datastream, Amundi Research

Financial stress channel

Implied volatility

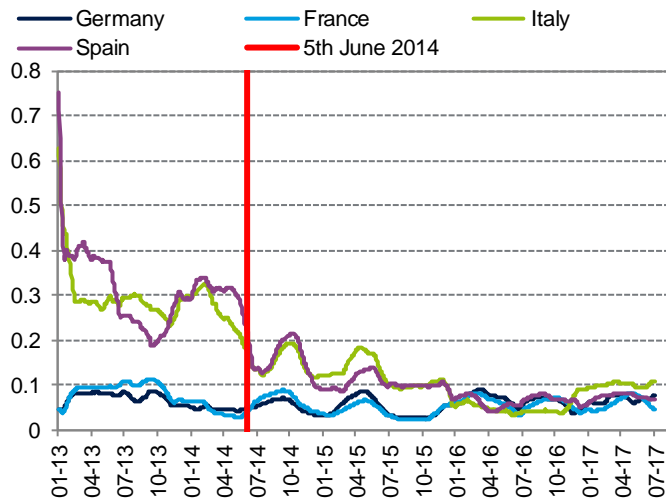


Source: Datastream, Amundi Research

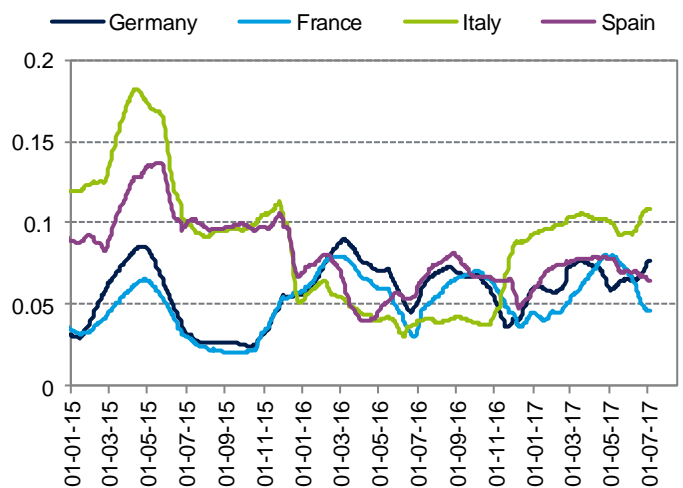


Source: Datastream, Amundi Research

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

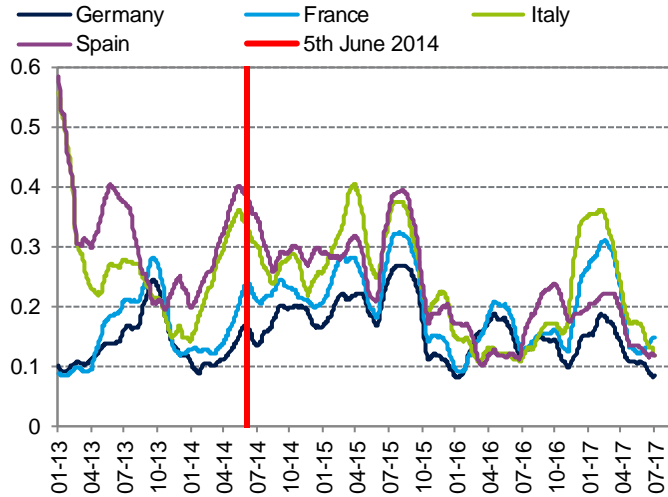


Source: Datastream, Amundi Research

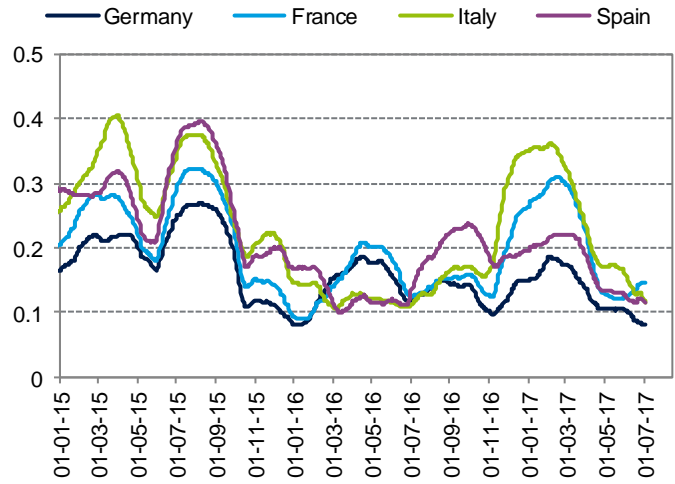


Source: Datastream, Amundi Research

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



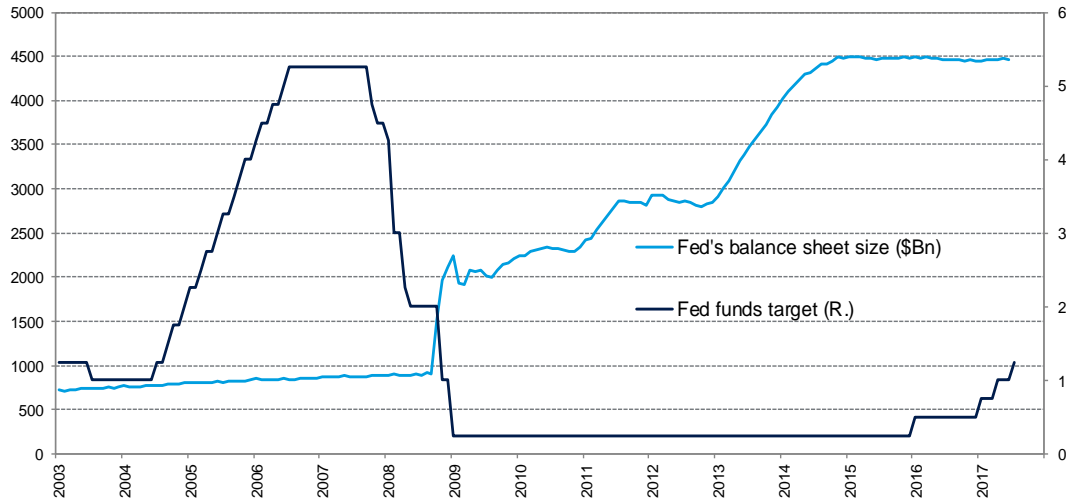
Source: Datastream, Amundi Research



Source: Datastream, Amundi Research

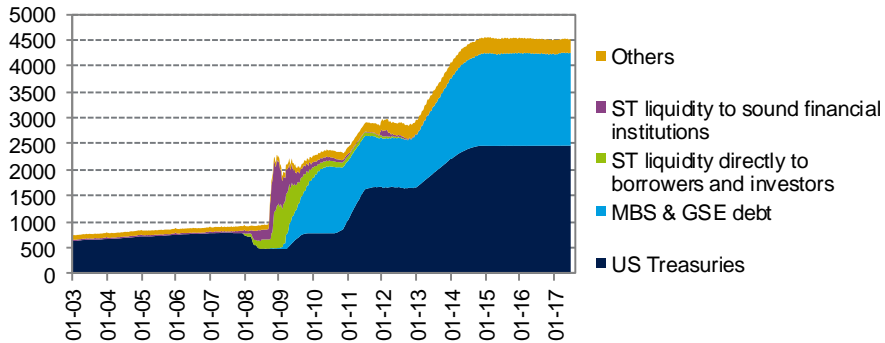
> **Fed's balance sheet**

Fed's balance sheet size vs fed funds target



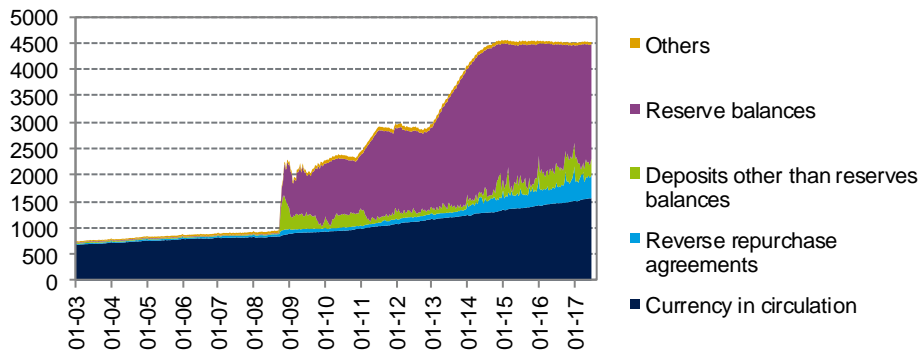
Source: Datastream, Amundi Research

Fed: assets (in \$bn)



Source: Datastream, Amundi Research

Fed: liabilities (in \$bn)



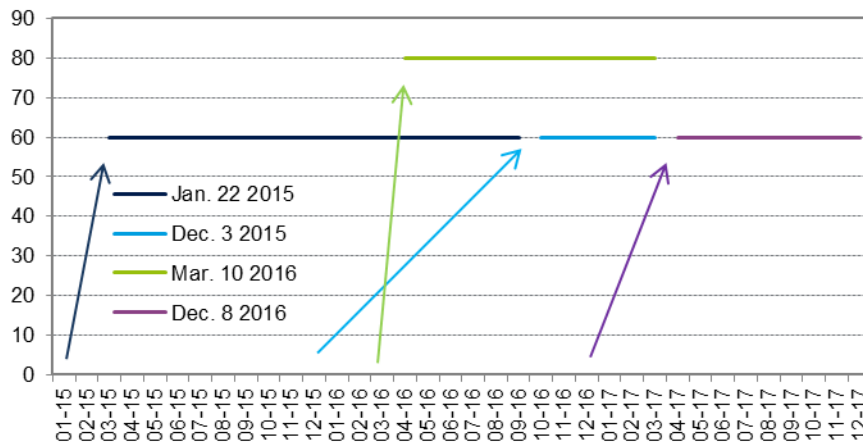
Source: Datastream, Amundi Research

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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