

Sovereign risk concentration in euro area banks' balance sheets & possible implications

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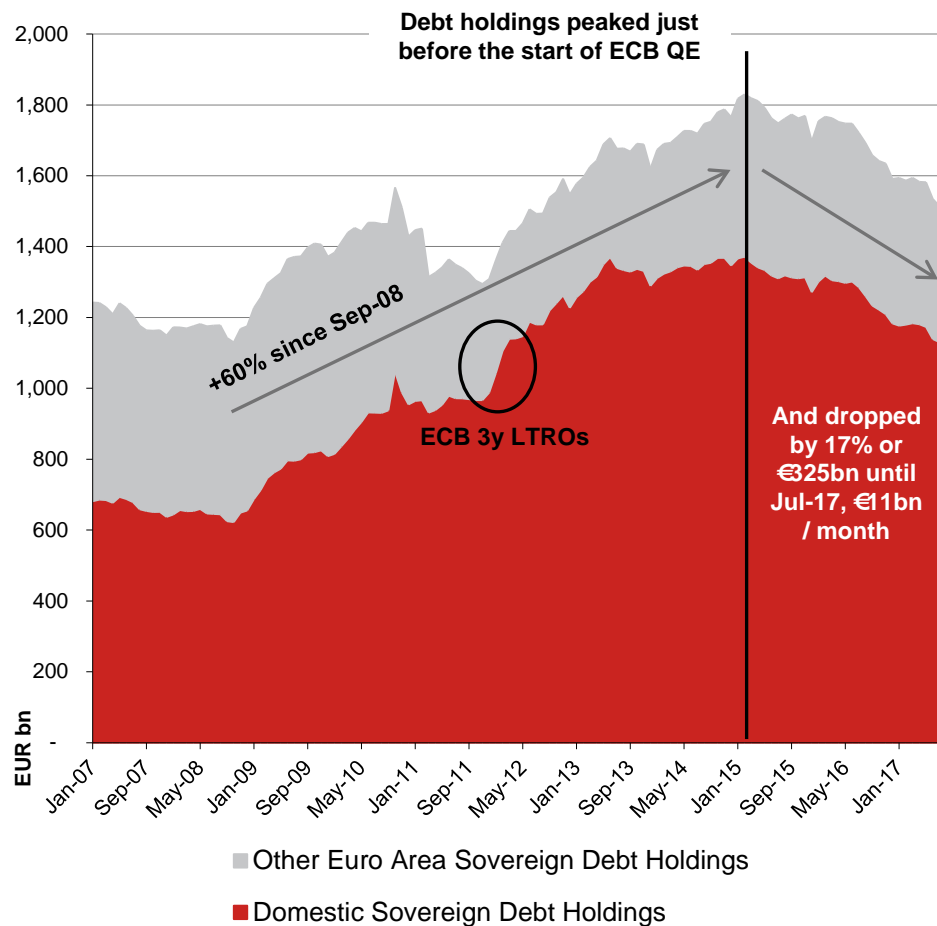
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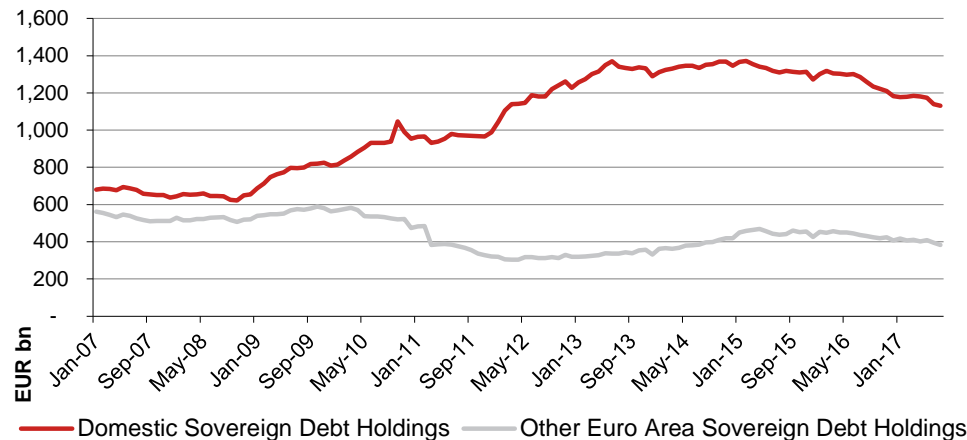
The EU debt crisis led to an increase in sovereign debt holdings by MFIs which started reversing under ECB QE

Holdings of EA sovereign debt by MFIs peaked at €1.88tr just before the start of ECB QE, following a **60% rise** since September 2008 (€0.71tr) . During ECB QE we've seen a fall of €0.33tr, equal to a **€11bn/month** pace.

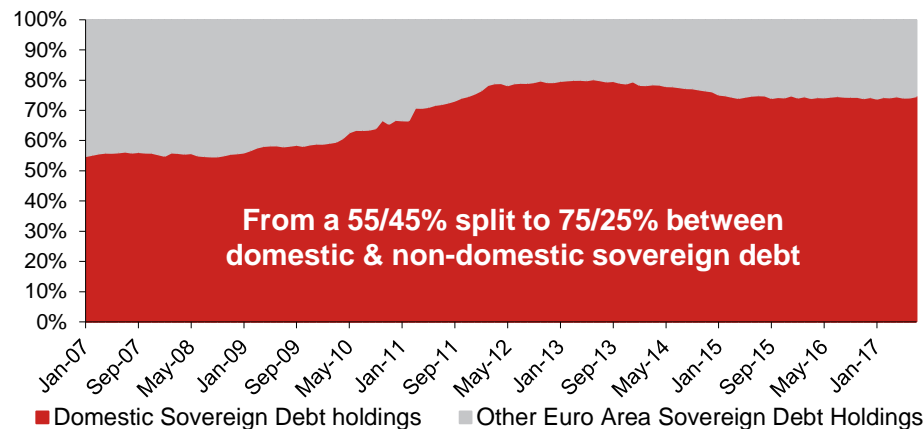
Euro area MFIs – Holdings of Euro area sovereign debt



Split to domestic vs other Euro area sovereign debt holdings



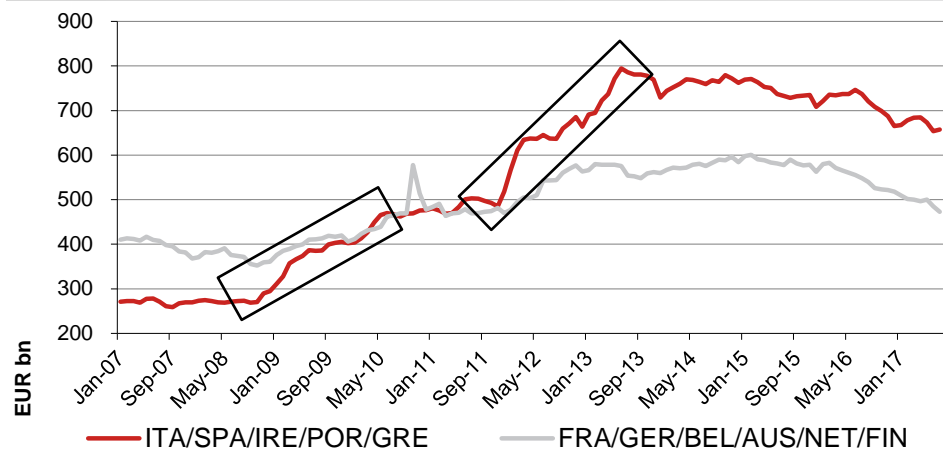
Home bias on the rise across Euro area MFIs



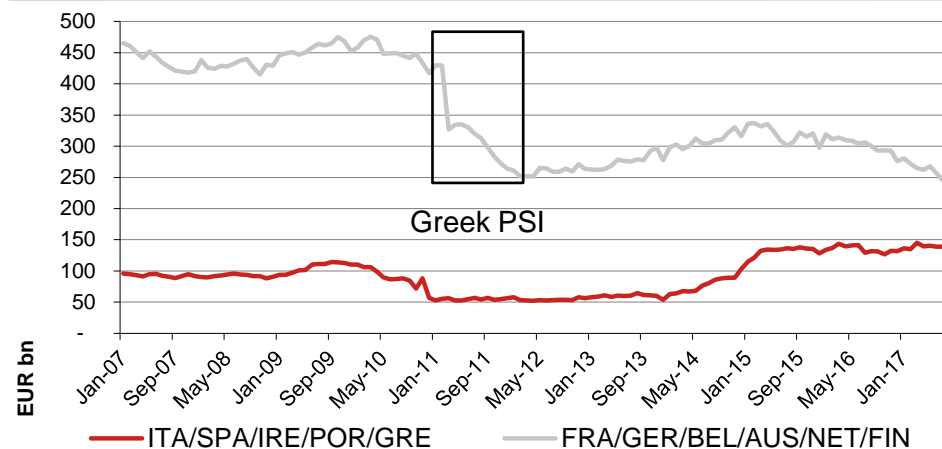
The increase in sovereign debt holdings has not been homogeneous between core & periphery MFIs

MFIs of peripheral countries increased their domestic debt holdings while MFIs of core countries decreased their non-domestic debt holdings during the crisis. Home bias is very strong among peripheral MFIs.

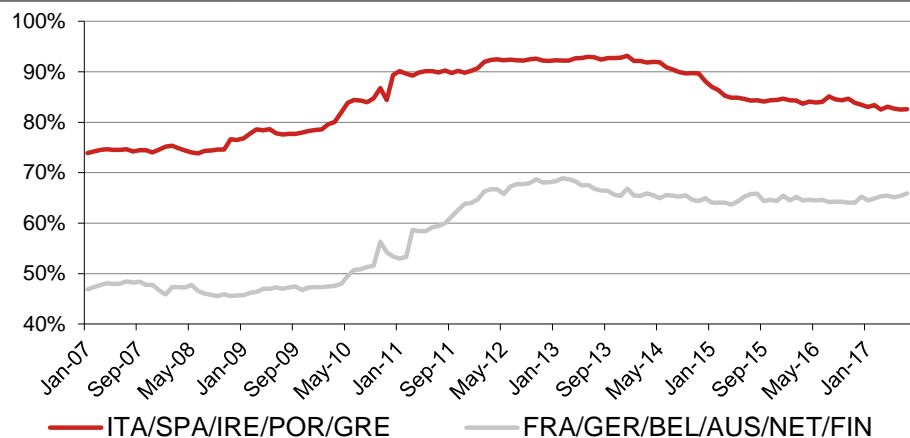
Domestic sovereign debt holdings – core vs periphery MFIs



Other EA sovereign debt holdings – core vs periphery MFIs



Home bias = Share of domestic sovereign debt holdings



• **Periphery MFIs:**

- Sep-08 to Jul-11: Increased their domestic sovereign debt holdings by 87% or **€34bn** & decreased their other EA debt holdings by 38% or **€35bn**.
- Nov-11 to Jun-13: Increased their domestic sovereign debt holdings by 64% or **€310bn**.
- Overall from Sep-08 to Jun-13 periphery MFIs almost tripled their domestic sovereign debt holdings (+ **€525bn**).

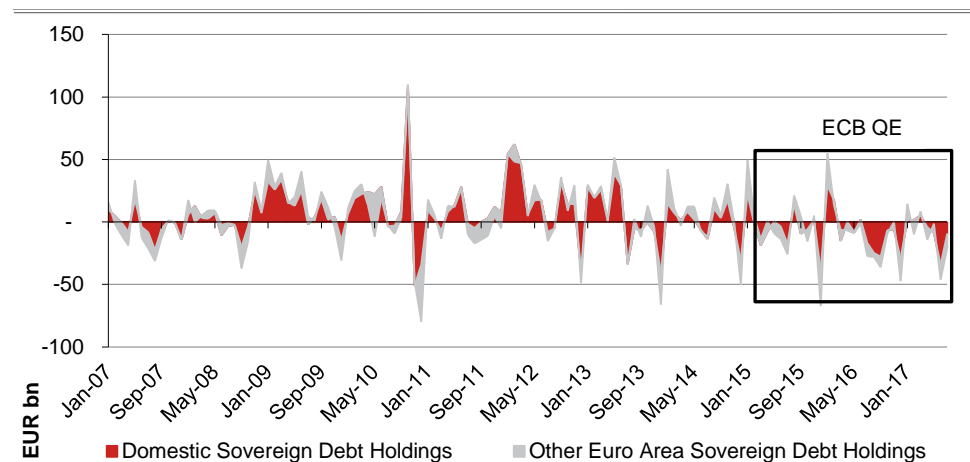
• **Core MFIs:**

- Feb-11 to Jan-12: Decreased their other EA sovereign debt holdings by 42% or **€180bn**. That was mostly peripheral countries' debt.

The financial crisis, the debt crisis and ECB's LTROs have led to an increase in debt holdings & home bias

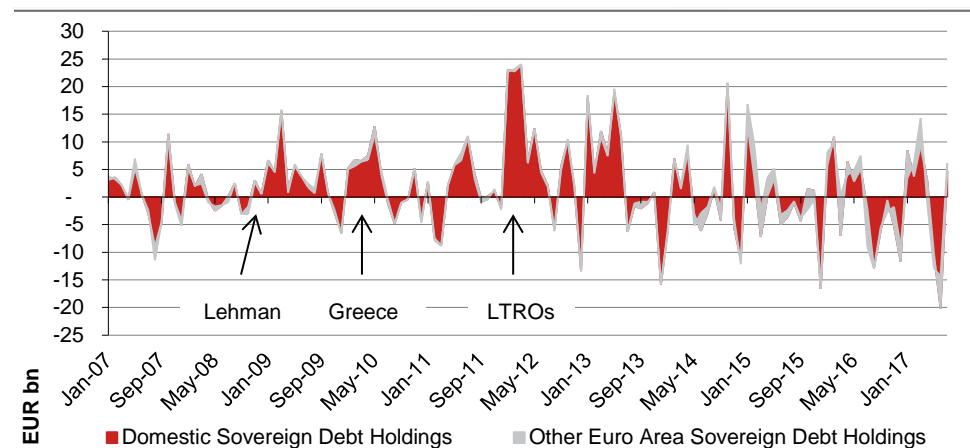
Domestic banks have become buyers of last resort during times of crisis while ECB's LTROs reinforced the so called "carry trade" where banks borrowed cheap money to invest in high-yielding sovereign debt.

Euro area MFIs – Monthly flows of sovereign debt holdings

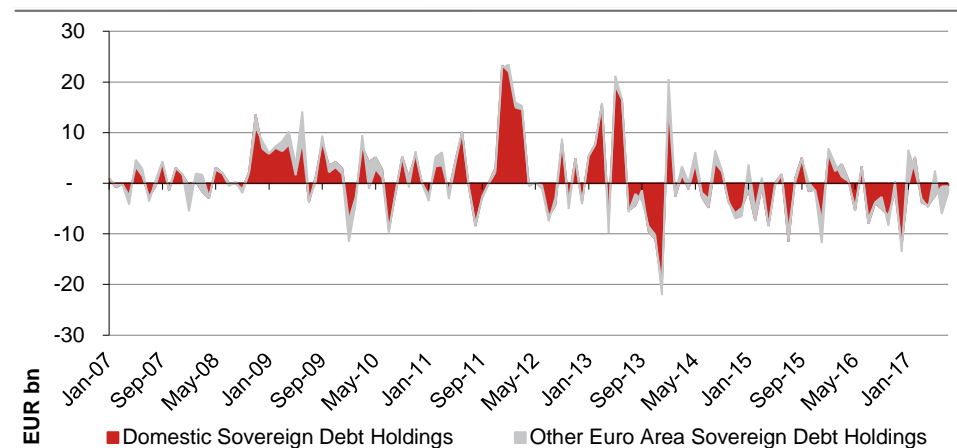


- ECB TLTROs and the post-Lehman period are the two occasions where the largest increases in sovereign debt holdings have been recorded.
- For periphery MFIs we also saw an increase in domestic sovereign debt holdings during the Greek crisis in 2010.
- The response of core MFIs was to reduce non-domestic debt holdings, especially peripheral countries' debt.

Italy – Monthly flows of sovereign debt holdings



Spain – Monthly flows of sovereign debt holdings

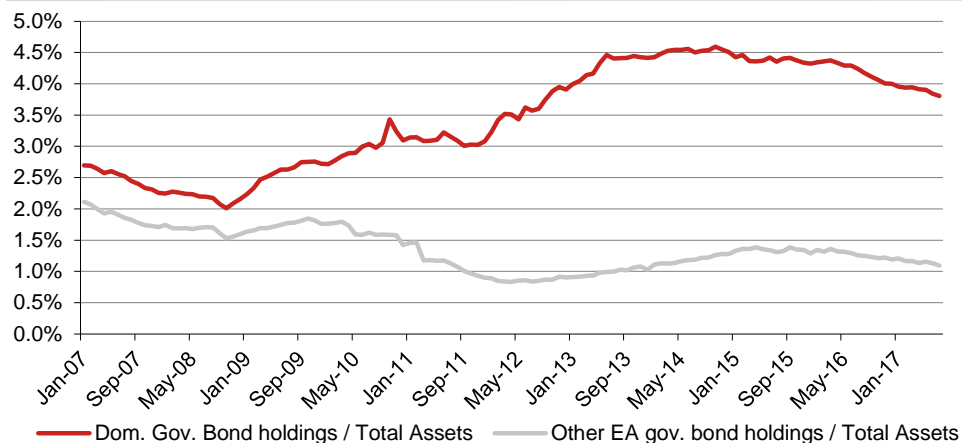


ECB data on aggregated euro area MFIs balance sheets
The spike in the upper chart in September 2010 is due to the creation of FMS in Germany

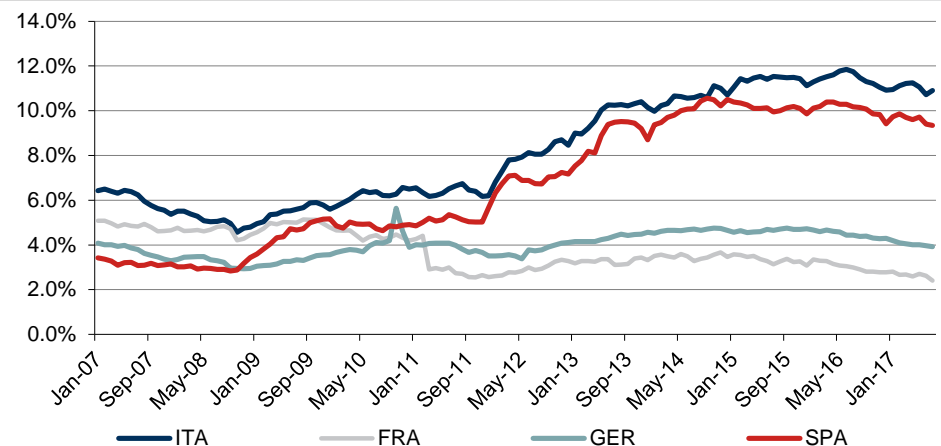
Sovereign debt holdings as a % of total assets: Different trends in core vs periphery MFIs

Across euro area MFIs, sovereign debt holdings are at around 4.9% of total assets. However, this ratio is 10.9% in Italy & 9.3% in Spain and much lower in core countries.

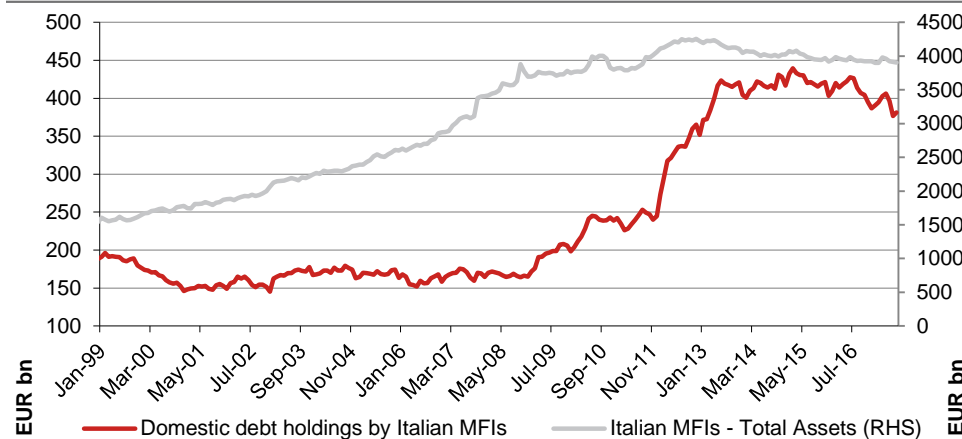
Euro area MFIs – sovereign debt holdings as a % of all assets



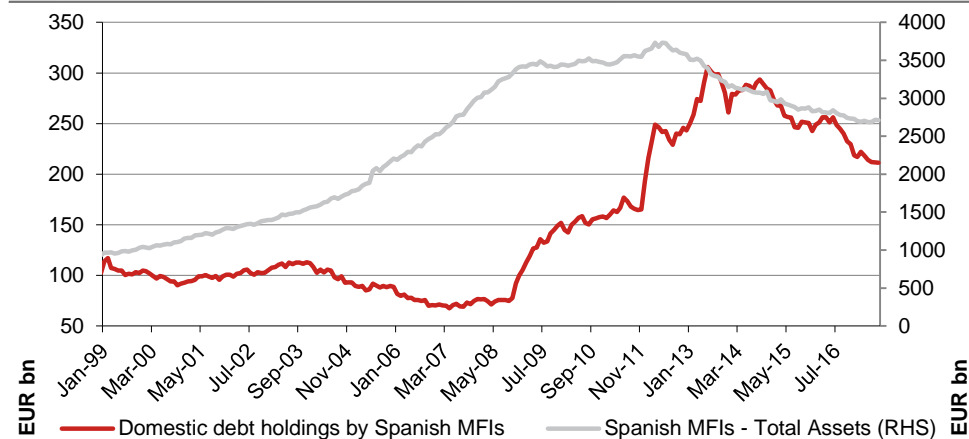
G4 – sovereign debt holdings vs total assets



Italian MFIs – sovereign debt holdings vs total assets



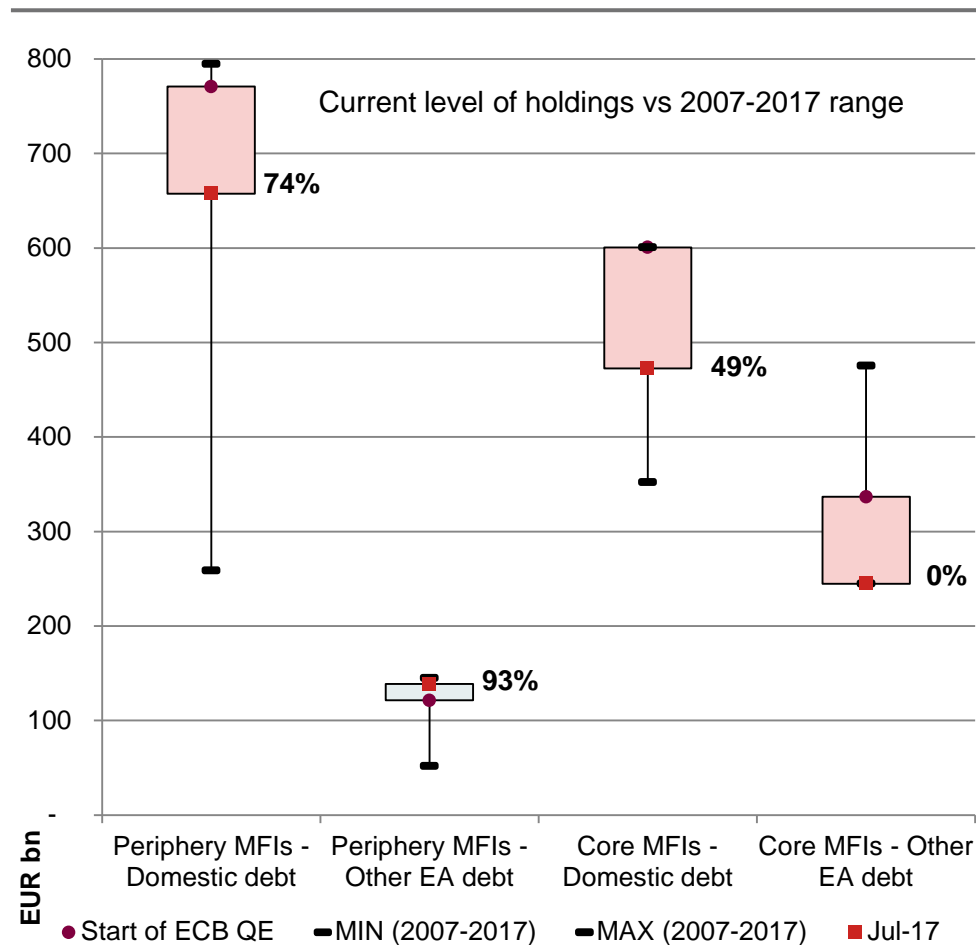
Spanish MFIs – sovereign debt holdings vs total assets



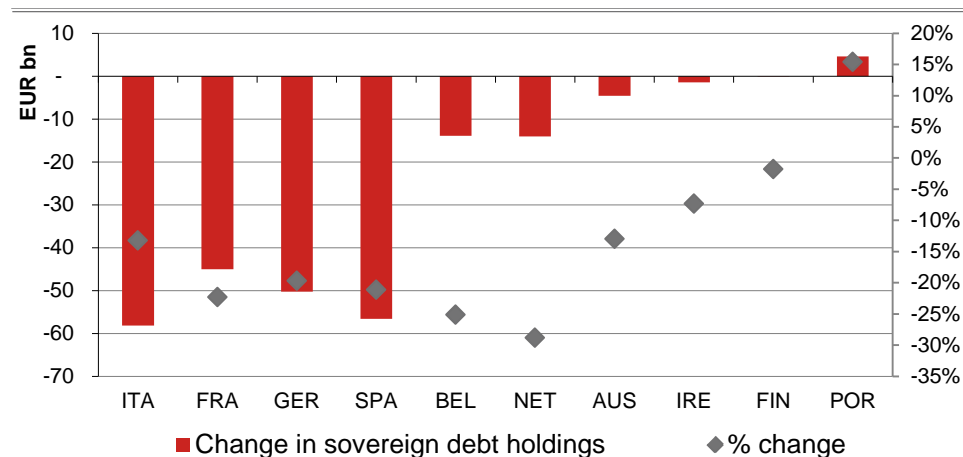
ECB QE has been an opportunity to reverse the trend of increasing sovereign debt holdings in MFI balance sheets

PSPP has bought €1507bn of government bonds vs net supply of €568bn in the examined period. This means 34% of the private sector balance sheet reduction because of PSPP is coming from euro area MFIs.

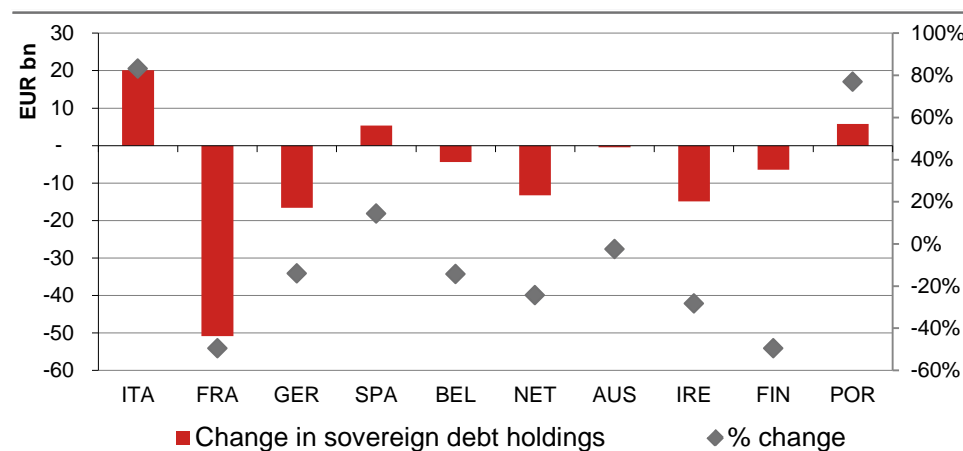
Where do we stand vs 2007-2017 range & since ECB QE?



Change in domestic sovereign debt holdings during PSPP



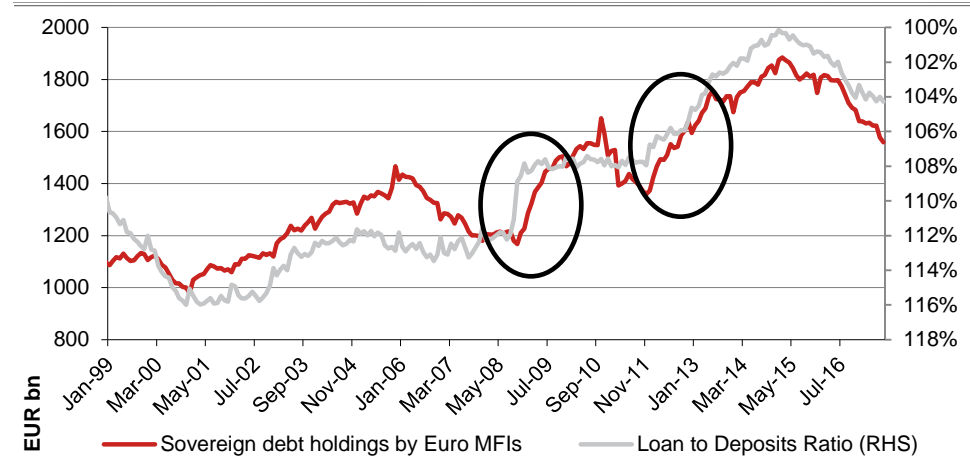
Change in other EA sovereign debt holdings during PSPP



0% risk-weights, exclusion from large exposure limits, and abundant cheap funding favoured sovereign debt

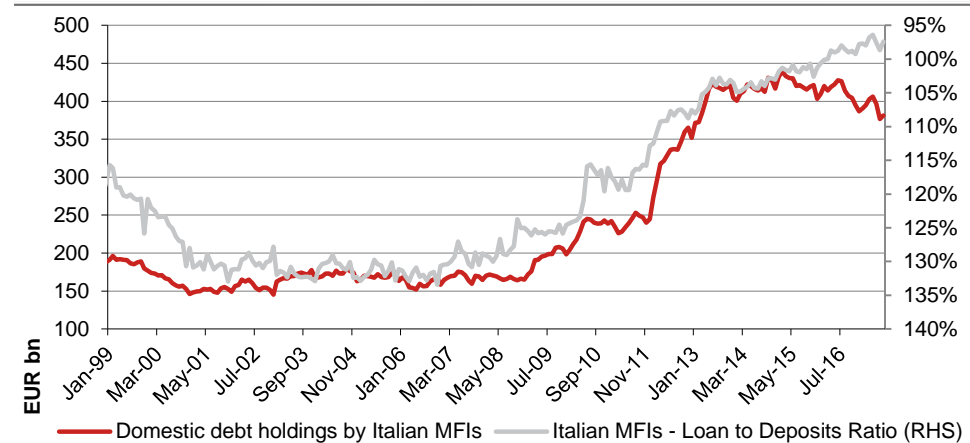
The regulatory framework, weak lending & NPLs played a key role in the relative increase in sovereign debt holdings by euro area MFIs. PSPP is an opportunity to reverse this phenomenon, before changing the rules.

Rise in sovereign debt holdings vs fall in loan/deposit ratio



- The significant increase in sovereign debt holdings by euro area MFIs is very correlated to the fall in loan/deposit ratio.
- Government bonds carry a **0% risk weight**, which in times of crisis leads to a reduction of appetite for private-sector loans which carry a much higher risk weight and a significant risk of non-performing (especially in periphery).
- Government bonds, except for carrying a 0% risk weight, are **excluded from existing limits within the large exposure regime**.
- LTROs & TLTROs (to a lesser extent) provided abundant funding for euro area MFIs at very low rates, hence leading to **carry trades** involving sovereign bonds (especially in periphery where yields were higher).

Italy – domestic debt holdings vs loan/deposit ratio



Spain – domestic debt holdings vs loan/deposit ratio



Moving away from the 0% risk-weight regime – the next challenge for regulatory authorities

Any attempt to change the EU regulatory treatment of banks' exposures to sovereigns will need to be smooth and gradual in order to prevent a sell-off of sovereign bonds & increased volatility.

Sovereign debt holdings, split to domestic/other EA, comparison to total assets, change during ECB PSPP

	Germany	France	Italy	Spain	Belgium	Netherlands	Austria	Finland	Ireland	Portugal	Greece
Total Assets (EUR bn)	7,819	8,662	3,904	2,713	1,091	2,447	849	454	1,047	402	327
Relative share (%)	26%	29%	13%	9%	4%	8%	3%	2%	4%	1%	1%
Sovereign debt holdings (EUR bn)	307	208	426	253	67	76	48	11	56	48	13
Relative share (%)	20%	14%	28%	17%	4%	5%	3%	1%	4%	3%	1%
Domestic	205	157	381	211	41	35	31	4	18	34	12
Other euro area	102	52	44	42	26	41	18	7	38	13	1
Home bias (%)	67%	75%	90%	83%	61%	46%	64%	40%	33%	72%	91%
Sovereign debt vs total assets (%)	3.9%	2.4%	10.9%	9.3%	6.2%	3.1%	5.7%	2.4%	5.3%	11.8%	4.1%
Reduction from Mar-15 to Jul-17	-67	-96	-38	-51	-18	-27	-5	-7	-16	10	-1
Domestic	-50	-45	-58	-57	-14	-14	-5	-0	-1	5	-2
Other euro area	-17	-51	20	5	-4	-13	-0	-6	-15	6	1
Change vs Mar-15 holdings	-17.9%	-31.5%	-8.2%	-16.8%	-21.3%	-26.5%	-9.4%	-37.5%	-22.6%	27.7%	-4.7%
Change vs Jul-17 total assets	-0.9%	-1.1%	-1.0%	-1.9%	-1.7%	-1.1%	-0.6%	-1.4%	-1.6%	2.6%	-0.2%

- The **sovereign-bank nexus** (link between national banking systems & sovereign debtors) played a key role during the crisis.
 - Example: During the Greek PSI, Greek banks faced severe losses on their portfolios of GGBs, leading to a large recapitalisation exercise which subsequently drove Greece's debt/GDP higher.
- Important steps have been taken to enhance the resilience of both banks and sovereigns and to address this negative spillover risks:
 - Enhanced Stability & Growth Pact (SGP): strengthen fiscal position
 - Higher capital requirements
 - Introduction of the bail-in tool
 - Single Resolution Mechanism (SRM)
- However, the EU regulatory treatment of banks' exposures to sovereigns has not been changed, still allowing for 0% risk weights.
- Compliance with liquidity requirements is another reason why banks invest in sovereign debt while the latter is key with regard to the financing of sovereigns and its use as collateral in the wider financial sector.
- PSPP has led to a significant reduction in sovereign debt holdings but these remain at high levels especially in peripheral countries.
- Any transition to non-zero risk weights on sovereign debt has to be very smooth and gradual in order to prevent a sell-off of sovereign bonds and increased volatility. A potential "**first mover advantage**" could lead to a frontloading of selling orders, thereby exacerbating price dynamics.

Appendix A-1

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