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European Distribution - Rates

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I Liquidity Buffers delle Banche

Implicazioni su Asset Allocation e Politica Monetaria dall’introduzione del LCR.

Convegno ABI Basilea 3 2013 – Roma 27 Giugno 2013

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Executive Summary

- Demand of **high quality assets (HQA)** increased considerably in the last few years
  - Risk aversion due to the crisis → change in bank funding behaviour
  - Basel III (Liquidity Risk regulation standards)
  - broader **financial regulation reform agenda**

- These dynamics have several repercussions on financial markets:
  - first, on the investment and **asset allocation policies** of Bank Treasuries which then have an impact on asset prices and bond market liquidity
  - second, **on Monetary Policy**, given the effect on EONIA and the increased (structural?) dependence of the Euro banking system to Central Bank and secured funding going forward
  - third, on the way investors should look and price **bank credit risk**

- To help understand better these issues, in the following slides we will consider:
  - the **size and composition of Banks Liquidity buffers** (using a random sample of 21 large financial institutions),
  - the **demand and supply forces** at play (using a broad definition of HQA*)
  - the recent revision of the **LCR** and its possible implications on money markets and monetary policy.

* HQA: includes Basel 3 definition and other high quality assets that can be used as collateral

In the news: Liquidity is a hot topic

FINANCIAL NEWS

Wednesday, 26 June 2013

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Confident banks start cutting their liquid assets

Matthew Attwood

24 Jun 2013

European banks are reducing their liquidity pools over concerns that excessive buffers could hit profitability.

While the trend is difficult to quantify, Bridget Gandy, co-head of Emea financial institutions at Fitch Ratings, points to reduced levels of bank funding in the bond market as being at least partly explained by greater comfort around liquidity, with issuers confident in not replacing every maturing facility.

According to data provider Dealogic, issuance of senior unsecured bonds by UK banks so far this year is $12.3bn, 63% down on the same period last year and almost 83% down on the same period in 2011. In Europe, the current total of $146bn is 8% down on last year and 41% down on 2011.

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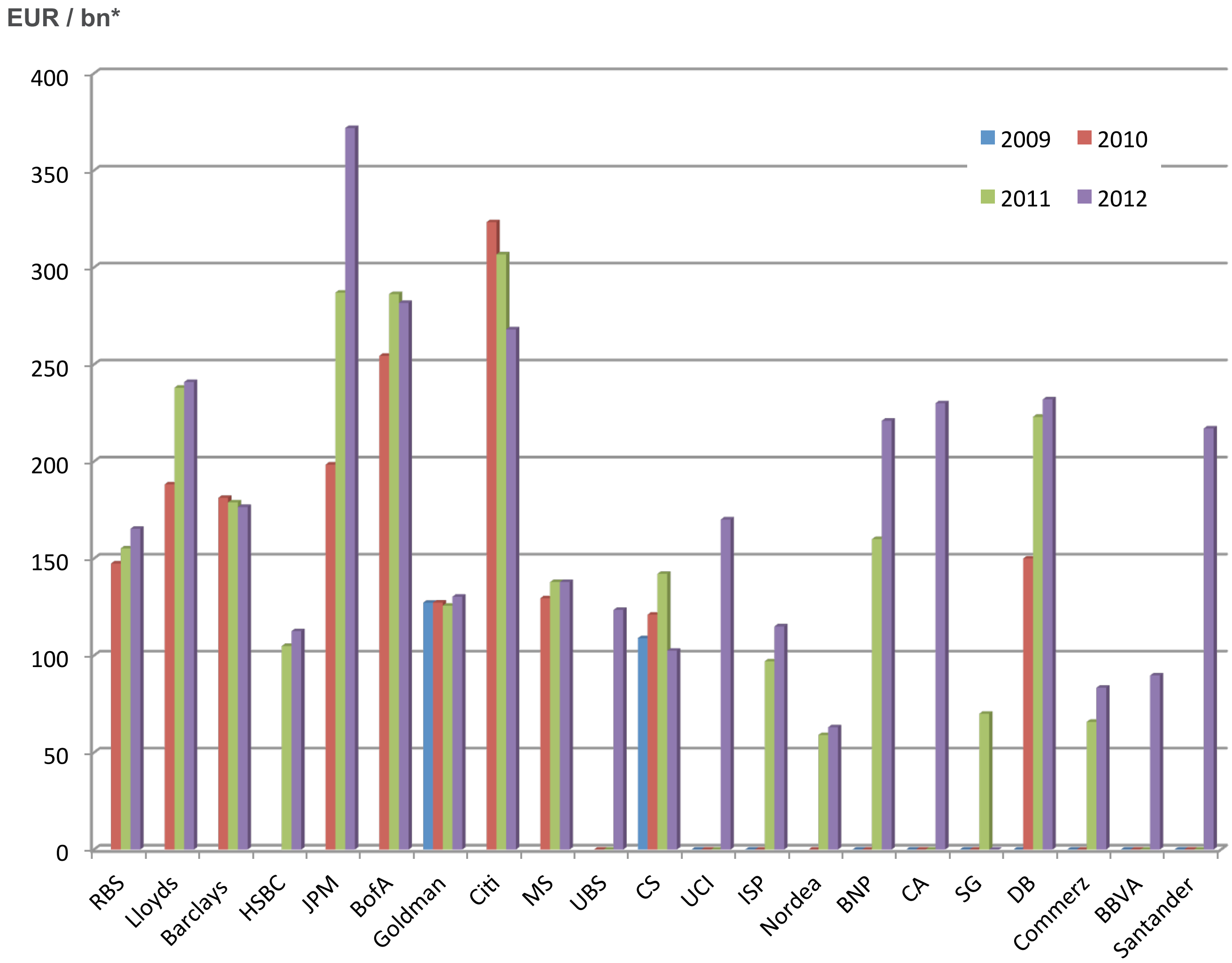
STORY TAGS

Investment Banking

Size* of the Liquidity Buffers (a random sample of 21 Large Institutions)

The first LCR "wave"



Source: Banks' Annual Reports.
* Amounts reported in Annual Reports in USD, GBP and CHF are converted into EUR using FX spot rate of COB 21 June 2013

- Big jump in assets held at system level
  - Eur ~1.8n at end 2010
  - Eur ~ 2.5tn at end 2011
  - Eur ~ 3.5tn at end 2012
- Reporting formats and data are still fragmented in Annual Reports
  - Almost non present until 2010
  - Started to appear in 2011
  - 2012 much better
  - Different definitions/ degree of disclosure (see next page)
- Composition and asset types
  - Not necessarily homogeneous
  - Significant cash (or liquid) reserves in some banks
  - Different standards based on jurisdictions and domestic regulators
  - e.g. FSA or FINMA guidelines are stricter

Composition of Liquidity Buffers

What's in these buffers? Some examples

1

Liquidity pool

Treasury manages a sizeable portfolio of liquid assets, comprised of cash, high grade bonds, major market equity securities and other liquid securities, which serves as a liquidity pool. A portion of the liquidity pool is generated through reverse repurchase agreements with top-rated counterparties. Most of these liquid assets qualify as eligible assets under the BCBS liquidity standards. We are mindful of potential credit risk and therefore focus our liquidity holdings strategy on cash at central banks and short-term reverse repurchase agreements relating to highly rated government bonds. The bonds are eligible as collateral for liquidity facilities with various central banks including the SNB, the US Federal Reserve (Fed), the European Central Bank (ECB) and the Bank of England. Our direct exposure on these bonds is limited to highly liquid, top-rated sovereign entities or fully guaranteed agencies of sovereign entities. These securities may also serve to meet liquidity requirements for our local businesses.

As of December 31, 2012, our liquidity pool based on our internal model was CHF 127 billion, net of the stress level haircut. The liquidity pool consisted of CHF 47 billion of cash held by major central banks, primarily the SNB, the Fed and the ECB, CHF 57 billion of securities issued by governments and government agencies, primarily of the US, Germany, France and the UK, and CHF 23 billion of other highly liquid assets including equity securities that form part of major indices.

2

The table below presents the fair value of our GCE by asset class.

in millions	Average for the Year Ended December 2012	2011
Overnight cash deposits	$ 52,233	$ 34,622
U.S. government obligations	72,379	88,528
U.S. federal agency obligations, including highly liquid U.S. federal agency mortgage-backed obligations	2,313	5,018
German, French, Japanese and United Kingdom government obligations	45,170	37,791
Total	$172,095	$165,959

3

Global Excess Liquidity Sources available to our broker/dealer subsidiaries totaled $22 billion and $31 billion at December 31, 2012 and 2011. Our broker/dealers also held other unencumbered investment-grade securities and equities that we believe could also be used to generate additional liquidity. Liquidity held in a broker/dealer subsidiary is available to meet the obligations of that entity and can only be transferred to the parent company or to any other subsidiary with prior regulatory approval due to regulatory restrictions and minimum requirements.

Table 18 presents the composition of Global Excess Liquidity Sources at December 31, 2012 and 2011.

Table 18 Global Excess Liquidity Sources Composition

(Dollars in billions)	December 31 2012	2011
Cash on deposit	$ 65	$ 79
U.S. treasuries	21	48
U.S. agency securities and mortgage-backed securities	271	228
Non-U.S. government and supranational securities	15	23
Total global excess liquidity sources	$ 372	$ 378

4

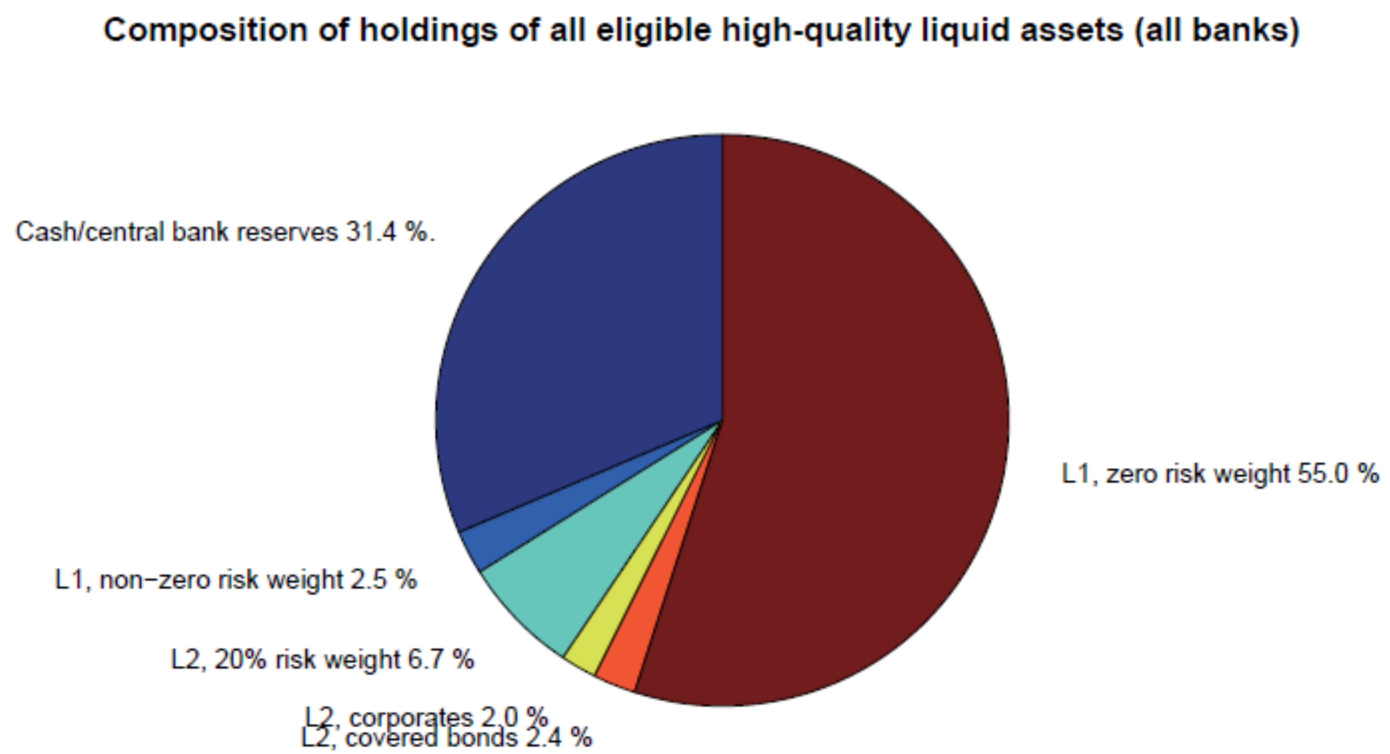
The primary liquidity group generally reflects eligible liquid assets, such as cash and balances at central banks, treasury bills and other high quality government and agency bonds, and other local primary qualifying liquid assets for each of the significant operating subsidiaries that maintain a local liquidity pool.

Secondary liquidity assets represent other qualifying liquid assets that are eligible for local central bank liquidity facilities but do not meet the core local regulatory definition. For example, secondary liquid assets include self-issued securitisations or covered bonds that are retained on balance sheet and pre-positioned with a central bank so that they can be converted into additional sources of liquidity at very short notice.

Source: Banks' Annual Reports

Composition of HQLA: BIS report 2012, end 2011 data

What's in these buffers? Latest system "photo" with LCR 1.0



Source: BIS, BCBS Papers, "Results of the Basel 3 monitoring exercise (as of 31 Dec 2011)", Sept 2012

Demand for High Quality Assets

Four main developments, of different nature, are driving up demand for HQA, some of which are **structural** and here to stay, in our opinion:

- **QE / Official Institutions Asset Purchases Programs**

- **LCR**

- **Collateralised derivatives**
    - CSA on Bilateral derivatives
    - CCPs
    - Mandatory OTC Clearing (DFA/EMIR/CRD IV)
    - Initial Margins on bilateral OTC (PFMIs)
    - limitations on collateral re-use

- **Secured funding**
    - Solvency 2
    - “encumbrance” of banks balance sheets
    - interconnectedness of banks/financial markets
    - pro-cyclicality
    - senior vs secured debt
    - guaranteed deposits

1. Implications for Asset Allocation

- Emergence of large buy and hold players (Bank Treasuries)
    - Generally speaking, investment decisions affected / driven by regulatory "*noise*", as well domestic approaches' "*nuances*" (e.g. UK FSA)

- "Crowded shop" for a given pool of assets available, also depending on national jurisdictions.

- Scarcity (in general) or availability (at times) of paper of eligible/liquid assets

- Liquidity / market depth / bond market functioning
    - traditional macro view vs relative value analysis could be distorted at times
    - "home bias" → "domesticisation" of (some) Government Bond markets
    - repo rates (GC and specials) tend to reflect the relative importance of specific securities

- The revised LCR formulation should in principle – and at the margin - reduce banks' appetite for government securities
    - although impact is limited as new category of L2B assets can only account for up to 15% of total HQLA

1a. Demand/Supply imbalances

Comparing global supply and demand of ‘safe’ assets

		$ trn	2008	2009	2010	2011	2012	*2013 E*
		Change in outstanding level						
Change in Supply		OECD sovereigns (AAA-AA rated only)	2.21	3.03	2.83	-0.02	1.58	*1.85*
		US GSE MBS	0.77	-0.06	-0.05	-0.02	-0.03	*0.15*
		US corporate bonds (AAA-AA only)*	0.11	0.24	0.23	0.12	0.04	*0.10*
		Covered bonds (AAA-AA only)	-0.10	0.04	0.02	0.03	-0.37	*-0.06*
		(A) Above total - change in supply	**2.99**	**3.25**	**3.02**	**0.11**	**1.21**	*2.03*
		Purchases by official institutions						
Change in CBs Demand	FED	Federal Reserve System - Treasuries	-0.26	0.30	0.24	0.66	-0.02	*0.54*
		Federal Reserve System - MBS	0.02	0.90	0.08	-0.15	0.09	*0.48*
		Total FRS purchases	-0.25	1.20	0.32	0.50	0.07	*1.02*
	BOJ	BoJ purchases of JGBs	0.22	-0.04	0.17	0.27	0.13	*0.40*
		BoE purchases of gilts	0.01	0.30	0.02	0.11	0.21	*0.00*
		Change in FX reserves globally	0.66	1.13	1.11	1.00	0.75	*0.53*
		(B) Above total - change in official demand	**0.64**	**2.58**	**1.62**	**1.88**	**1.16**	*1.95*
Change in Banks Demand		**Difference (A) minus (B)**	**2.35**	**0.67**	**1.40**	**-1.78**	**0.05**	*0.08*
		*Memo: bank purchases of gov't securities***	*0.36*	*0.85*	*0.93*	*0.53*	*-0.10*	*0.00*
		(C) Row (B) minus bank purchases	*1.99*	*-0.18*	*0.48*	*-2.31*	*0.15*	*0.08*

* based on Barclays index; also includes some eligible sovereigns, supranationals and munis
** bank purchases of government bonds (and MBS for US), for banks in US, 'core' Europe and Japan, including Japan Post Office
Source: Barclays Research, Haver Analytics. Updated: 28 April 2013

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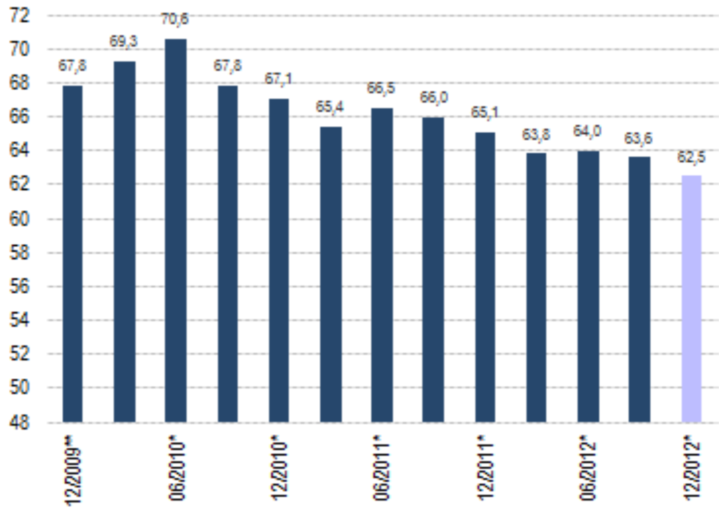
1b. Central Banks' Demand

Not just QE….. The SNB example

1c. OATs Holdings and ASW Spread

Non-resident holdings of Negotiable French Government debt securities

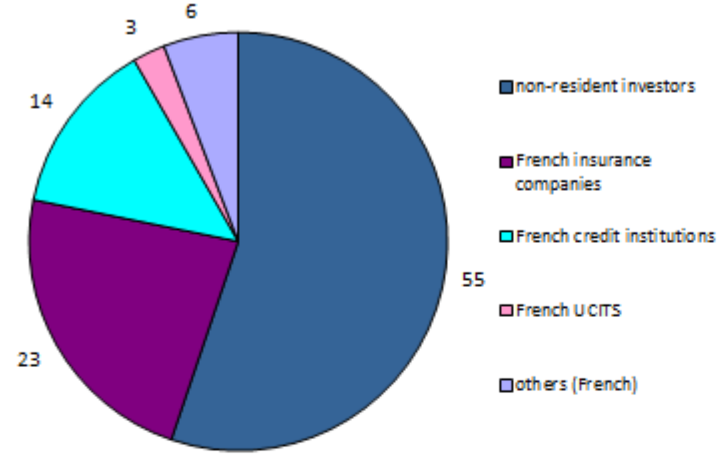
as a % of negotiable debt outstanding



Source: balance of payments
(*) figures quarterly revised (**) figures annually revised.

OATs ownership by type of holder (Q4 2012)

structure in %

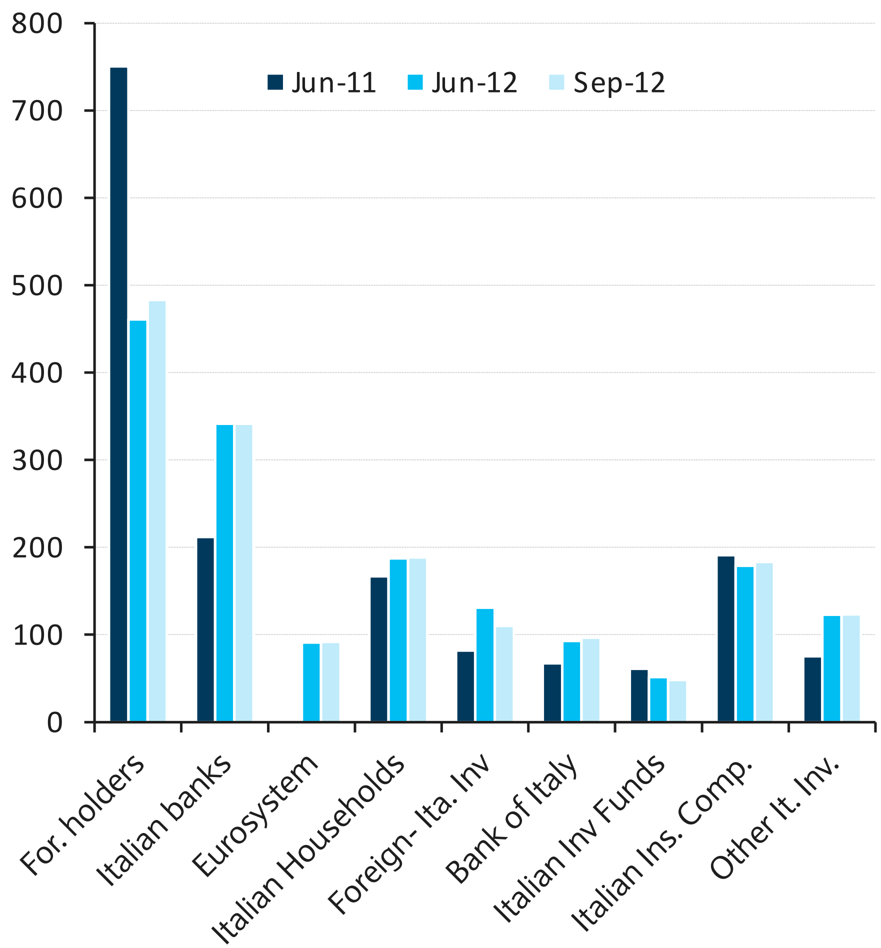


Source: Banque de France

Source: AFT Monthly Bulletin, AFT website: www.aft.gouv.fr / Debt Management

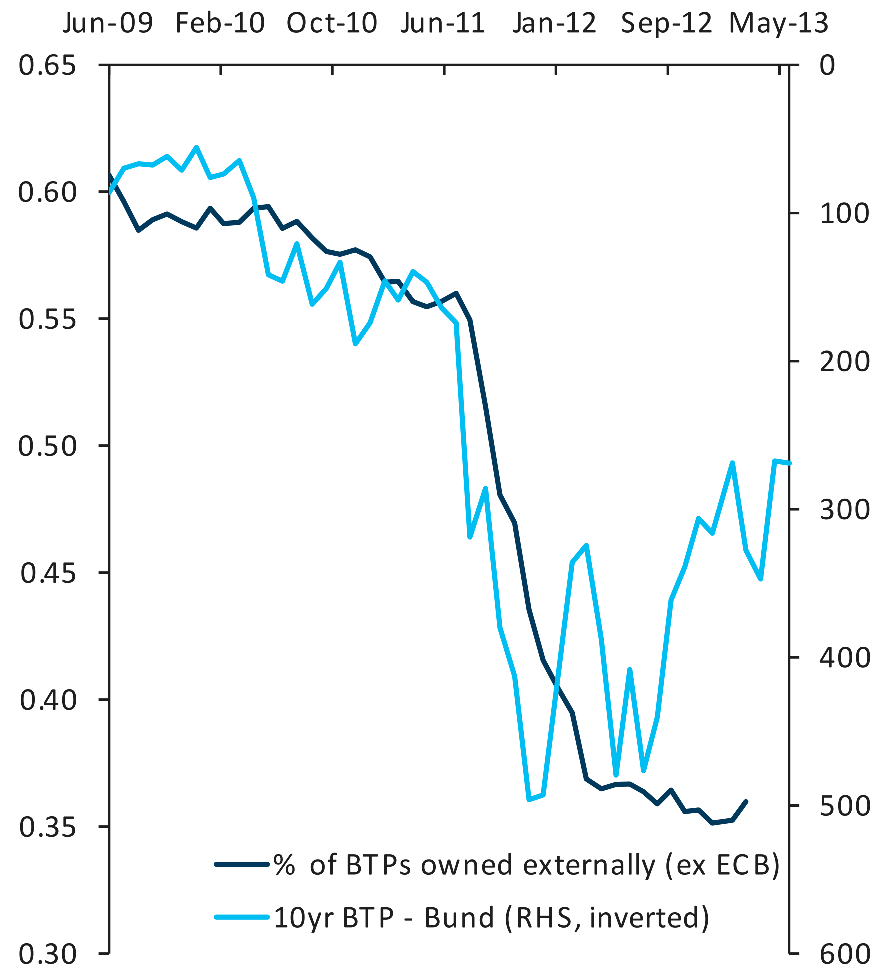
1d. BTPs holdings: non domestics lower, bottoming…?

Italian market debt: breakdown by holder (€bn)



Note: Foreign: Ita. Inv.: Individually managed portfolios and investment funds managed by foreign institutions but attributable to Italian investorsSource: Bank of Italy, Barclays Research

Non resident holding and BTP/Bund spread



Source: Bank of Italy, Barclays Research

Composition of HQLA: Impacts of 6 Jan "LCR easing"

Lightening Up the LCR "burden" – LCR "light"

On 6 January 2013, the Basel Committee on Banking Supervision announced a revised version of the Liquidity Coverage Ratio (LCR), with important amendments.

The LCR was reaffirmed as an essential component of the Basel III reforms in terms of liquidity regulation.

However, the new version is more flexible with respect to the draft announced in 2010.

- Numerator: wider range of eligible assets to be considered as HQLA
- Denominator: changes in the computation of NCOF (*run off rates*)
- Live date: gradual introduction ("phasing in") with 60% min. req. in 2015

We think that the changes to the numerator (Level 2A and 2B) could have less of an impact than those to the denominator (changes in run off rates).

"……The Basel Committee ……will continue to conduct further work on the interaction between LCR and …….central bank facilities"

Source: Barclays Interest Rate Research, Europe Special Topic and US Money Markets (10 January 2013)

2a. Implications for money markets:…..in US

- the LCR revision on 6th Jan included a reduction on the drawdown rate on the unused portion of "committed liquidity facilities" provided by banks to non-financial borrowers (to insure payment is made at maturity), introducing *de facto* a distinction by type of borrower

- the reduction from 100% to 30% will significantly alleviate the implicit "charge" in banks balance sheets (freeing up as much as $ 800bn)

- it will reduce the cost to banks of providing liquidity backstops to their corporate franchise while at the same time may increase their willingness to participate in syndicated lending or in the CP market

- with this change large US banks are significantly above their LCR and could

    - use their excess capacity to increase loan commitments

    - reduce their buffers and the associated negative carry (less term money to be raised which was typically invested in very low yielding assets)

Source: Barclays Interest Rate Research, Europe Special Topic and US Money Markets (10 January 2013)

2b. Implications for money markets: …..in Europe

- LCR regulation should reduce banks' participation in the short-term interbank market.
  - preference of secured vs unsecured funding
  - prefer liquidity (from the market or from the ECB) longer than 30 days
  - increase in liquidity premium on the EONIA curve (less steeper curve?)
  - the new version of the LCR should temper this impact

- Revised LCR also likely to reduce, but not eliminate, banks' dependence on central bank liquidity
  - central bank reserves are Level I assets
  - incentive for banks to prefer central banks' refinancing
  - not likely to make it easier for central banks (and the ECB in particular) to **exit**

- In the medium term LCR should have an impact on Mon Pol implementation
  - banks likely to prefer to hold excess reserves for precautionary reason
  - given preference for longer term liquidity also LTRO could have more important role

Source: Barclays Interest Rate Research, Europe Special Topic and US Money Markets (10 January 2013)

2c. Implications: the ECB perspective

1. Money Markets

   - Unsecured unclear (less >1mo ; more >1mo?)
   - Secured ⬆

2. Central Bank Operations
   - CB refinancing benefits of 100% rollover (no asimmetry between QE vs repo based CB)
   - MLF/MRO
   - O/N Deposits qualify as HQLA
   - Increased reliance using non-HQLA as collateral to improve LCR
   - Bid rates at tenders: possible increase at tender operations vs short term market rates

3. Lender Of Last Resort role
   - Eurosystem Mon. Pol. framework and LCR have different definitions
     - Collateral pool eligible for ECB funding is larger than current B3 definition of HQLA
     - L1 assets benefits from a beneficial treatment (no haircuts) under LCR
     - the opposite is true for L2 assets
   - Repo with CB backed by non-HQLA attract a more favourable treatment than interbank repo transactions

For these three reasons, liquidity risk regulation and the central banks' monetary policy framework cannot be treated in isolation, and their interaction merits careful attention.

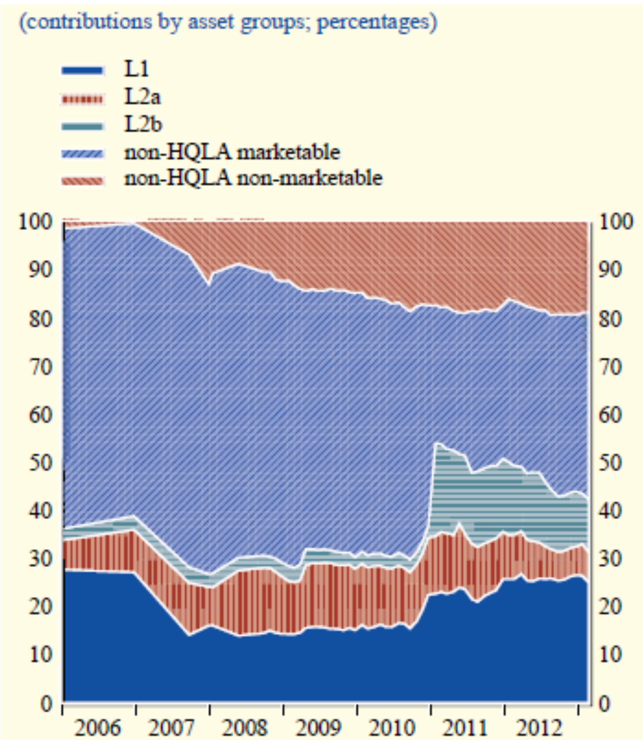
Source: ECB, Monthly Bulletin, April 2013

2c. Implications: ECB monitoring framework

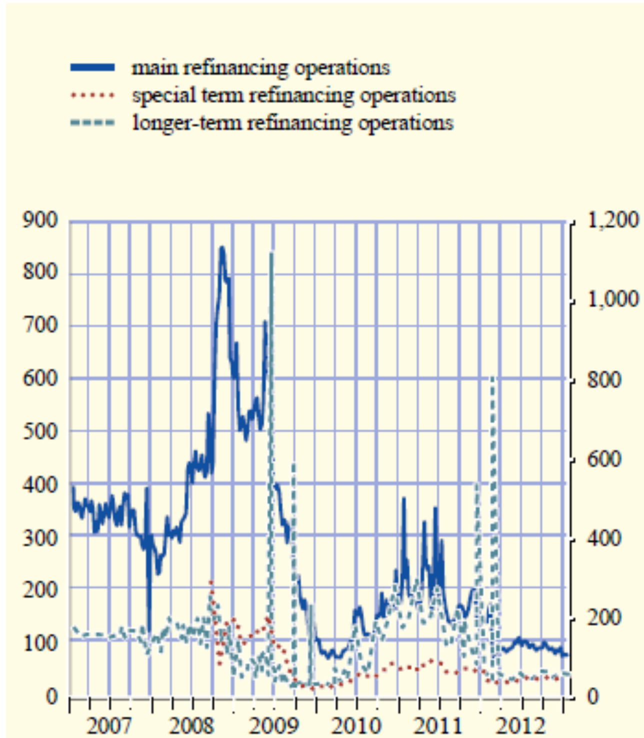
Given the relevance for monetary policy implementation, the Eurosystem has introduced a **framework** to monitor the impact of the introduction of liquidity risk regulation, via three set of key indicators:

- Central Banks Operations
- Bank-based indicators
- Market-based indicators

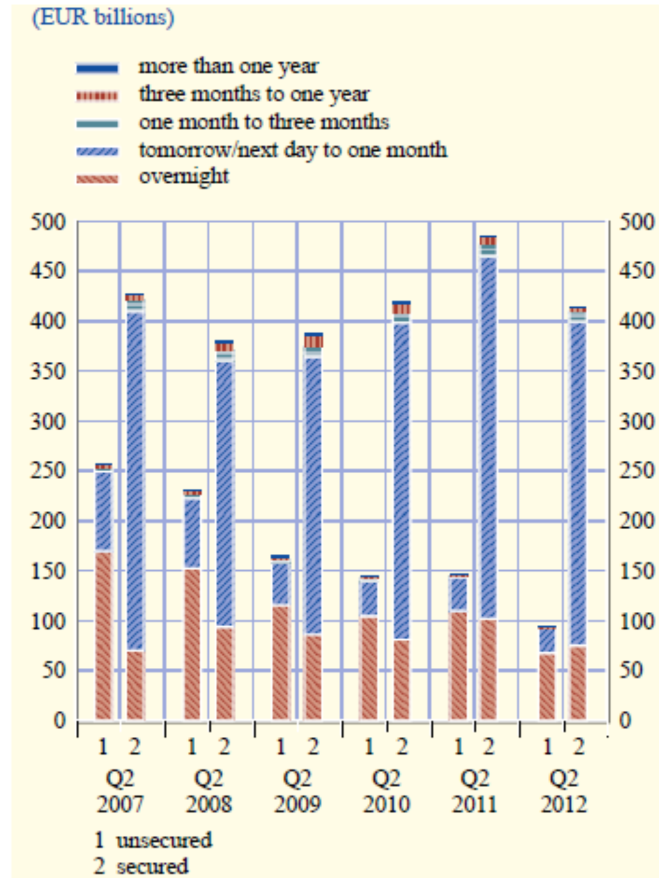
HQLA in posted collateral



No. of Bidders in Tenders



Turnover in MM



Source: ECB, Monthly Bulletin, April 2013

Supply of High Quality Assets

Directly
→ In most jurisdictions, sovereign issuers are the dominant suppliers of HQA. And have increased their issuance .
→ Unsecured debt issued by highly rated corporates – including both financial and non-financial firms – broadens the pool of HQA.

Large (US) Corporations are very cash rich however and invest in HQA!

Supply "pool" is rating sensitive! → downgrades are very important in a "collateralised world"

There are other potential ways of increasing supply, <u>indirectly</u>:

- *Collateral reuse and transformation (s.c. collateral "velocity")*
- *Broader (wider or more harmonised) collateral eligibility*
- *Pooling and securitisation of assets*
- *Collateral optimisation*

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Conclusions

As regulatory and industry's discussions should and will continue on these issues, some *food for thought* for the next ABI Basilea 3 Conference in 2014!

- FED "tapering" vs BOJ "bazooka" ?

- LTRO exit … will Dec 2013 be the key date ?

- rating sensitivity….. should we all become less rating-dependent ?

- collateral velocity …. is collateral "*speeding*" ?

"Collateral makes the world go around, but does not go around the world"

(Godfried De Vidts, Chairman ICMA ERC)

APPENDIX

Definition of HQA

Three overlapping definitions can be considered.

The narrowest one is based on regulatory considerations and follows the Basel Committee on Banking Supervision in including only high-quality liquid assets (**HQLA**) under the Level 1 and Level 2 definitions of the liquidity coverage ratio (LCR). Assets that qualify for the LCR are expected to have low credit and market risk and be easy to value, exchange-listed, traded in active markets, unencumbered, liquid during times of stress and ideally central bank-eligible.

A broader definition, termed high-quality assets (**HQA**), takes a more market-based stance, including all assets that market participants can use to meet collateral demand from derivatives transactions. This definition will be the relevant one for assessing the impact of over-the-counter derivatives reforms.

The broadest definition, termed collateral assets (**CA**), targets the pool of assets that qualifies for use in collateralised funding transactions (such as in covered bonds, agency and private-label mortgage-backed and asset backed securities).

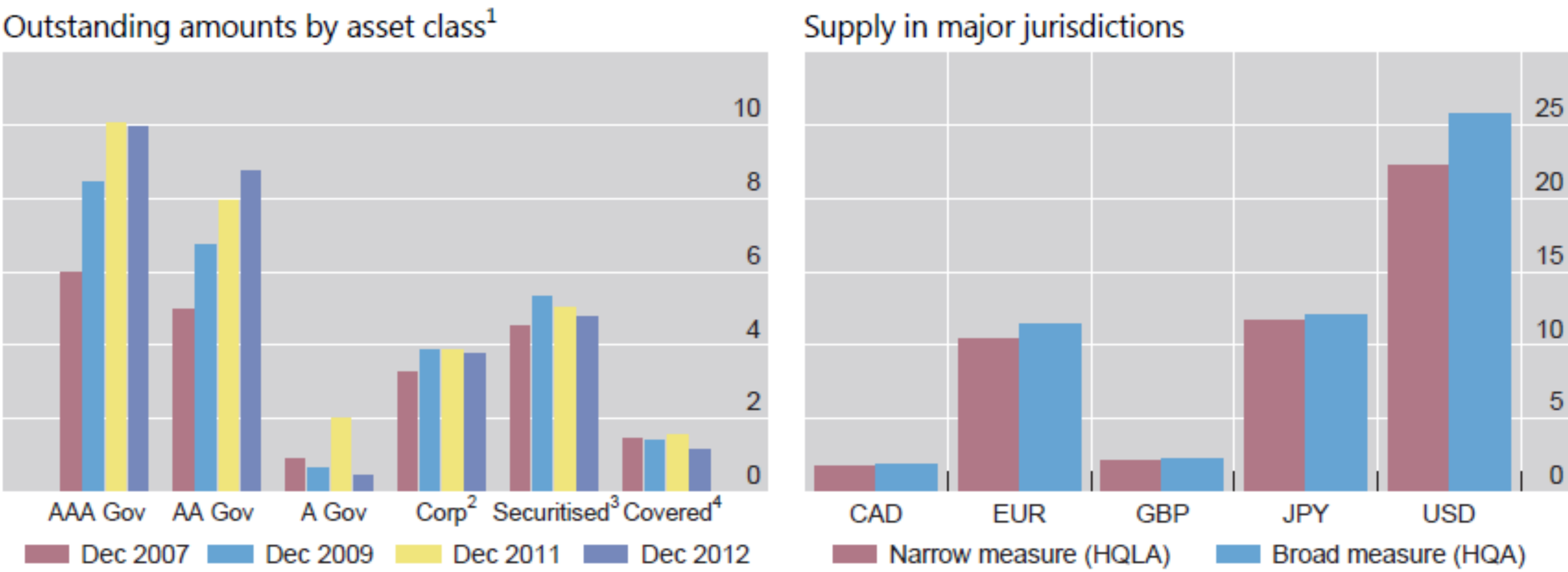
Notably, the categorisation of any particular asset under these last two definitions may vary with time and across different markets and counterparties.

Source: BIS, CGFS Papers No. 49, “Asset Encumbrance, Financial Reform and the Demand for Collateral Assets

HQA: Available Pool of Debt

High-quality debt securities

In trillions of US dollars — Graph 4



[1] Outstanding amounts with maturity greater than one year. [2] Global corporate bonds rated single-A or higher. [3] US securitised bonds. [4] Global covered bonds.

Source: National Data; BIS, CGFS Papers No. 49, "Asset Encumbrance, Financial Reform and the Demand for Collateral Assets

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Central Banks Assets

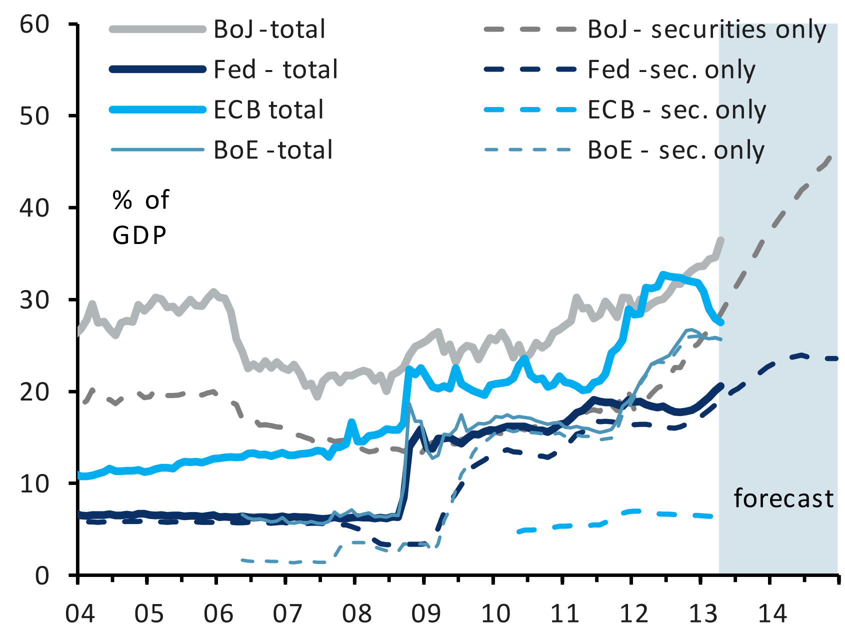
Central bank assets

In trillions of US dollars

Graph 13

Sources: IMF, *International Financial Statistics*; Datastream; BIS calculations.

Central bank balance sheets (% GDP)



Source: Haver Analytics, Barclays Research. Note: *Excluding the Eurosystem, quarterly

ECB borrowing: estimated country breakdown, €bn, May 2013

	3y LTROs borrowing					Other ECB operations		Tot. ECB liquidty	ELA	Liquidty deposits				
	Dec 3y LTRO	Feb 3y LTRO	Total 3y liquidity	Estimated payback (end of May 2013)	Amount Remaining at the 3y LTROs	End-May MRO	End-May LTRO			Depo facility	Fixed Term deposits	Curent account	Reserve requirement	Excess reserve
Germany	39	30	69	57	11	0	0	11		21	89	88	27	61
Ireland	31	30	61	22	39	7	1	47		2	0	2	*1*	*1*
France	107	65	172	82	90	1	7	98		27	30	40	*20*	*20*
Spain	125	183	308	72	236	23	4	263	2	*2*	0	13	*11*	*2*
Belgium	17	23	40	25	16	0	1	17		1	9	8	5	3
Greece	0	0	0	*0*	0	64	0	64	20	0	0	1	1	0
Netherlands	3	21	24	11	13	*0*	*0*	13		*15*	49	47	*13*	*34*
Italy	116	139	255	8	247	5	7	258		1	2	21	13	8
Luxembourg	3	2	5	3	3	0	0	3		*14*	*4*	*15*	*7*	*8*
Austria	8	7	15	10	5	*0*	*0*	5		1	0	13	3	10
Portugal	25	25	50	5	45	3	1	49		1	0	6	*2*	*4*
Finland	0	4	3.6	0	4	0	0	4		2	13	18	1	17
Cyprus	0	0	0	0	0	0	0	1	11	0	0	2	1	1
Total	473	529	1,002	293	709	103	21	833	33	86	197	273	105	168

Note: Note: the total 3y liquidity refers only to the countries in the table and is net of liquidity already repaid by some banks because of the shift to ELA (like banks in Greece and in Cyprus). All data refer to end of May except for Luxemburg, Holland, Cyprus for which May data are not available yet. For Spain and France the table shows our estimates as data from BdF and BoS are average in the reserve period and in the month respectively. in italics: our estimates Source: ECB, National Central Banks, Barclays Research

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