21 March 2013

European Banking Authority
Tower 42
Old Broad Street
London EC2N 1HQ

Re: EBA/DP/2013/01

Submitted via email: EBA-DP-2013-01@eba.europe.eu

Dear Sir or Madam,

Response to Discussion Paper on defining Liquid Assets in the Liquidity Coverage Ratio (LCR) under the draft Capital Requirements Regulation (CRR)

On behalf of the members of the Association for Financial Markets in Europe (**AFME**), we welcome the opportunity provided by the European Banking Authority (**EBA**) to comment on the proposals put forward in the Discussion Paper (**DP**) defining Liquid Assets in the LCR under the draft CRR.

We fully support the EBA's initiative to solicit the industry's views on crafting of appropriate definitions of liquidity and credit quality of transferable assets and appropriate haircuts for the purpose of the LCR requirements as specified by the draft CRR.

This letter contains responses to the questions raised in the DP. Furthermore, we have also made some observations (both high-level and specific and not necessarily covered by the questions in the DP) that you may find useful to note as part of this review exercise.

Observations on the DP

EBA approach should align with the updated Basel III proposals

It would be useful to understand if, as a result of its proposed analysis, the EBA intends to establish an additional set of liquidity criteria, including its interplay with Basel III proposals and whether these criteria are meant to override the guidance under those proposals. We understand that, pursuant to Article 481(2) of the draft CRR, the EBA have been tasked with reporting (by 31 January 2014) on appropriate uniform definitions of high and extremely high liquidity and credit quality.

Given the recently updated Basel III proposals, we welcome the EBA's intention to potentially redefine the universe of liquid assets risks deviating materially from the framework of Basel III. It is important for prudential liquidity requirements to be harmonised across different regions and jurisdictions and we hope that global policymakers can agree a consistent set of liquidity parameters across regions. At present, it seems that the liquidity definitions to be outlined by the EBA are not the same as the Level 1, 2 and 2B assets proposed under Basel III.

Also, it will be important for the EBA to ensure that in the process of addressing the specific characteristics of the European market, its methodology covers a sufficiently wide range of highly liquid and high credit quality securitisations (as well as other assets). This will help create consistent approaches for calculating liquid assets and establish a level playing field.

EBA approach should strongly consider a broadened asset universe

We believe it is also important to emphasize the need to observe consistency in evaluating liquid assets under the updated Basel III proposals published in January 2013.In this respect, we believe that this is a good opportunity for the EBA to question the classification of RMBS as only a Level 2B asset. Clearly, its historical credit performance (0.07% default rate between mid-2007 to end 2011, Source: Standard & Poor's) and spread volatility (as shown in Figure 2) demonstrate that it compares favourably with many other securities that form part of the LCR. These characteristics merit re-evaluating RMBS for a more favourable liquidity treatment.

Furthermore, in an effort to achieve uniform and consistent treatment of liquid assets, the updated Basel III proposals should consider possible expansion of the liquid assets universe. These proposals currently make reference to RMBS of high liquid and credit quality evidenced by reference to a rating threshold of AA. Although the industry welcomes the inclusion of at least highly liquid and high credit quality RMBS, the effect of this is that RMBS rated down to AA is eligible under asset class 2B whereas no availability is offered to other highly liquid asset-backed securitisation (**ABS**)asset classes, such as prime auto loan, credit card ABS and other high quality ABS. Also, considering that liquidity arises from refinancing in the public market, interbank market and with central banks, there is no reason to differentiate between RMBS and other types of ABS. It should be recognised that high-quality ABS is an important long-term financing instrument available to investors that will support growth of the real economy. Market-based initiatives to stimulate securitisation markets include emerging labels for high-quality, transparent and standardised securitisations such as the Prime Collateralised Securities (**PCS**) initiative (see www.pcsmarket.org).We believe that it is imperative for the liquid assets to include a wide range of high quality and readily liquefiable ABS as this has and will continue to prove instrumental in driving activity in the real economy in Europe. We believe that it will be particularly important for the EBA, as part of this exercise, to expand the liquid assets universe and further help reinforce the need for uniform selection criteria for liquid assets.

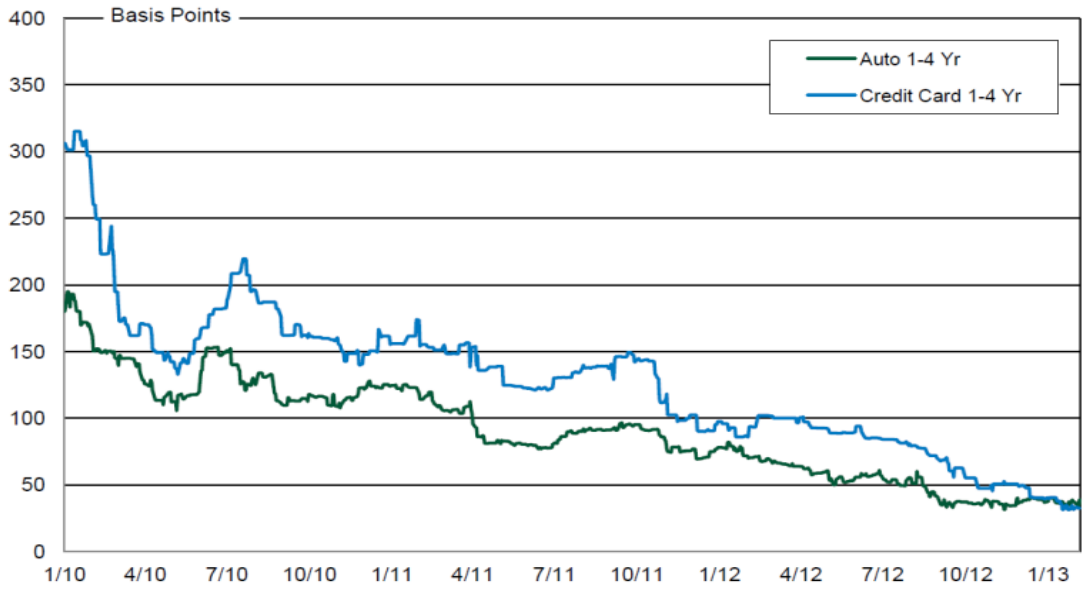
From page 41 of the DP, it appears that the EBA is open to other ABS asset classes as well as RMBS. We would like to note that the characteristics under RMBS (i.e. 'characteristics of the underlying asset pool and risk retention regulation') should apply to all high quality ABS. Risk retention under article 122A of CRD2 (**Article 122a**)is particularly important as European banks are very unlikely to purchase and hold for liquidity purposes non-122A compliant ABS in times of liquidity stress due to the higher RWAs associated with such non-compliant ABS[1].

Quantitative analysis will show that the public markets refinancing of ABS post 2008 re-opened with investors focusing on shorter term assets, such as auto loan ABS. This occurred before public term investors resumed buying RMBS. However, the private repo market and private ABS financing by banks was already active in RMBS and other types of ABS – demonstrating that there is no particular reason to exclude other types of ABS from the analysis.

[1]Of course, risk retention will also be required for other types of regulated investors, not just credit institutions, for example AIFMs, UCITS, and insurance companies under similar EU regulations to Article 122a.

The strong performance of ABS spreads since January 2010 (see Figure 1) also illustrates the increasing level of stability in times of significant market volatility:

Figure 1: European 1-4 Yr AAA ABS Spreads

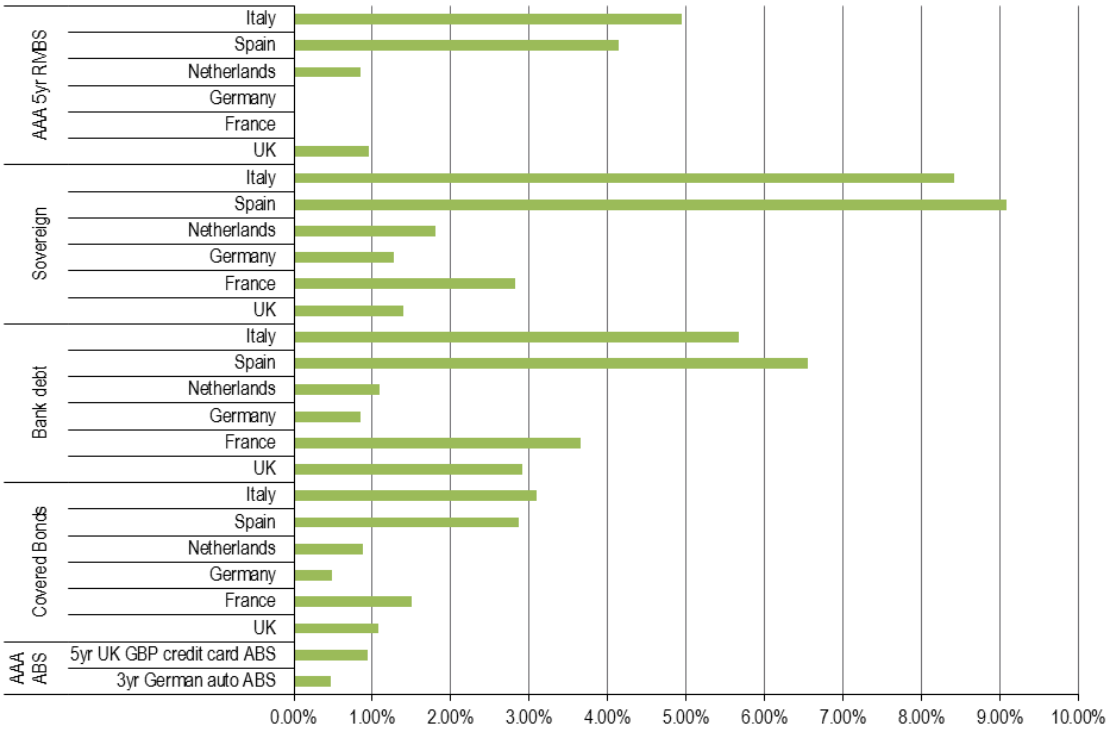


Source: Markit

We believe that the senior publicly placed tranches of the major ABS sectors should be considered, including (but not necessarily limited to) RMBS, auto loans/leases, consumer loans, SME loans and credit cards. More generally, high quality ABS has exhibited the following features that highlight its strong liquidity and credit quality characteristics:

- Continued interest from investors since and through the crisis as demonstrated by the continued decline in spreads;
- Strong historical credit performance and stable AAA rating in most European securitisation sectors; further supporting data are available from issuers as well as credit rating agencies. It should be noted that such high quality ABS have also performed significantly better, from a ratings and credit quality standpoint, than certain other securitisation products. During the period mid-2007 to end 2011, credit cards, other consumer ABS and SMEs had a weighted average default rate of 0.14% whereas the same figure for CMBS, CDOs and CDOs of ABS was 4.71%(Source: Standard & Poor's). One reason for the superior performance of high quality ABS in Europe is the regulatory framework of how the underlying assets are originated in Europe ;
- Eligibility as collateral for the European Central Bank (**ECB**) open market operations ensures interest from bank investors in this asset class;
- Further transparency of ABS due to loan by loan disclosure requirements in order to achieve ECB and Bank of England eligibility for ABS;
- Eligibility under high quality labelling initiatives, such as the pan-European PCS, the German True Sale International (**TSI**) and Dutch securitisation labelling initiative;
- Outperformance from a secondary market pricing standpoint of certain securitisation sectors versus various European sovereign debt, bank debt and certain covered bonds;
- De-linkage between securitisations and the unsecured debt ratings of banks, the latter of which adversely impacted bank debt and certain covered bonds particularly during the period of Eurozone market volatility experienced in 2011:

Figure 2: Annual credit spread volatility by asset class, Jan 2011 – Dec 2012



Source: BofA Merrill Lynch Global Research

- Introduction of ABS specific market indices in recent years have contributed to overall transparency and liquidity thereby assisting market participants, particularly investors, in evaluation. For example, Markit launched the Markit iBoxx European ABS index in June 2011, a cash bond index designed to track the performance of the European floating-rate ABS market. This index provides investors with a benchmark to assess returns available on European ABS assets denominated in EUR, GBP, USD, and measure the relative performance of their portfolios.

Any analysis of asset liquidity should incorporate the secured funding/ repo market

We recognise that the EBA aims to conduct a comprehensive review of asset classes in order to determine their potential eligibility under the LCR. The assessment should therefore, focus on markets that actually facilitate liquidity instead of those that are used for purposes of price discovery. In this respect, the EBA's proposed analysis excludes any repo considerations, despite the fact that the primary test of an asset's liquidity profile is whether it can be used as collateral in secured funding transactions. The repo market represents the most expedient way of raising cash, and, as a result, is generally banks' top choice for generating liquidity when required. In particular, the eligibility of a particular asset for repo with a central bank may serve as an appropriate measure for "extremely high" liquidity. In this way, we directly benefit from the rigorous liquidity assessments for repo eligibility of individual assets that central banks, which are providers of ultimate liquidity backstops, have already performed. This demonstrates that asset liquidity is not determined entirely endogenously but can be certified through institutional recognition. An asset that is not eligible for repo with central banks can be tested against other liquidity metrics to gauge if it exhibits "high" liquidity.

Outright asset sales may require more time to execute and, depending on the nature of the stress event, net proceeds from a sale can be attributable to factors other than liquidity drivers. It is also important to understand whether securities' trading patterns are linked to liquidity. For example, a number of sovereign

and corporate bonds do not trade heavily in the securities market but form a major source of liquidity in the repo market.

EBA should broaden its analysis beyond EU currencies

The EBA approach would only cover assets issued in EU currencies, implying the exclusion of other major world currencies – notably Swiss Franc (**CHF**), Japanese Yen (**JPY**), and, above all, the US Dollar (**USD**). The latter, in particular, is a significant omission in light of the fact that the USD is considered to be the world's main reserve currency. Moreover, to the extent European sovereign bonds are denominated in USD, our understanding is that these would be excluded from the EBA analysis. It is also unclear how assets denominated in the non-EU currencies will ultimately be treated in the LCR calculation. This aspect of the EBA's methodology warrants reconsideration. We acknowledge EBA's objective to develop a comprehensive basis for its analytical framework against the backdrop of tight timelines for submission. However, we would like to highlight that limiting the scope of this exercise in the manner described above will result in a significant gap in the analysis and prevent development of a broad-based framework addressing the entire market structure. It will be useful to know if the EBA expects authorities in other jurisdictions to perform analysis on a similar basis and, if so, whether such an approach will be acceptable to the EBA.

Consistent application of the EBA's approach by other European regulatory bodies

Furthermore, the proposed EBA approach should be utilised consistently by other European regulatory authorities. For example, EIOPA has calibrated the proposed risk weights of ABS and RMBS for Solvency II capital charges purposes based disproportionately on legacy US subprime RMBS and home equity mortgages, despite the fact that EU insurer investors will not be able to invest in such discredited structures in the future given the significant regulatory changes in Europe to date, specifically the requirement for risk retention[2].

AFME's analysis of fixed income trading activity in context of MiFID II presents important lessons for any similar work undertaken by the EBA

Although the EBA proposes to utilise MiFID data as part of its analysis, a recent AFME study on trading activity in the context of MiFID II offers some important lessons. As background, AFME's work dealt with the evaluation of fixed income trading activity in relation to the MiFID legislative process aimed at creating a transparent market structure for trading in fixed income markets.

While the secondary market is an important source of liquidity in terms of asset purchases and sales, it remains only one of a number of components of the overall liquidity framework. In order to build a macro view of liquidity, other central sources such as collateral eligibility and the repo and securities lending markets, need to be considered. AFME's work focused solely on providing data on (i) actual trading activity of a certain defined pool of fixed income assets over a defined time period; and (ii) how often these defined instruments actually traded. It specifically did not attempt to define what were liquid and illiquid assets, since many assets which are highly liquid, and defined as highly liquefiable, do not necessarily trade often for a variety of reasons. The AFME study also did not seek to identify or provide insight into assets that can provide liquidity for the purposes of meeting the requirements of the LCR under Basel III or the CRR or for meeting other regulatory measures and standards in the prudential supervision of bank liquidity. The factors that are most relevant in the consideration of the market characteristics for MiFID are very different from those that are relevant to the management of

[2] See article 135 Solvency 2.

institution-specific liquidity under Basel III or the CRR which concern the ease with which firms can realise value from the sale or repo of individual or portfolio of assets (which may or may not already be traded) using appropriate haircuts. For example, a good quality security (e.g. a high quality securitisation or covered bond), may have a low trading activity (e.g. due to a buy-to-hold investor base or a high number of comparable securities) but is often inherently liquid since it can be sold quickly. Also, secondary market liquidity varies across fixed income asset classes and is also security specific within each asset class.

Impact of Financial Transaction Tax[3] is an additional consideration for EBA in its liquidity analysis

We would also like to highlight the likely impact of the financial transaction tax (**FTT**), expected to be introduced on 1 January 2014, on liquidity of financial instruments. FTT will be 0.01% on derivatives and 0.1% on other financial instruments (such as shares and bonds, including securitisations). It is important to note that the FTT is not applicable at issuance but only on subsequent trading of securities. Proponents of the FTT suggest that it is likely to deter excessive trading and promote market stability and long-term investing. Obviously, there is a compelling counterargument that the FTT will result in higher price volatility, increased transaction costs and cost of capital and lower secondary market liquidity. This will also seriously impact the repo market.

The FTT will also have a potential impact on the management of firms' liquidity resources. Sound liquidity management requires that firms regularly demonstrate the ability to liquidate their liquid assets, whether by sale or repo. Aside from providing comfort that firms have the ability to generate cash when needed, the frequent turning over of the portfolio means that the market will not know whether the firm is acting under 'business as usual' or stressed conditions. The costs of the FTT will have a significant impact on this prudent liquidity management.

An interesting comparison for the FTT was the implementation of a similar scheme in Sweden during 1989 that led to massive falls in bond sales and futures and options trading, eventually causing the scheme to be withdrawn.

Comments on EBA's proposed questions

Q1. Given the difficulties with obtaining transactional data outlined here, do you think a data sample cover 2008-2012 is sufficient for this analysis? Would you see merit in extending the sample in those countries where more data is available?

Firstly, we believe it is important to recognise the need to obtain complete and consistent data. Financial institutions are likely to maintain different types of data and a key task will be to ensure the alignment of this data through a rigorous data cleaning exercise. Furthermore, it will also be useful to collate data relating to all assets. A question emerges if separate analysis needs to be conducted on data pertaining to "normal" and "stressed" conditions. Clearly, it is difficult for any bank to hold sufficient liquid assetsif the entire market shuts down.

[3] European Commission's proposal for a Council Directive implementing enhanced cooperation in the area of the FTT (http://ec.europa.eu/taxation_customs/resources/documents/taxation/com_2013_71_en.pdf).
Comments from EFAMA on the proposal (http://www.efama.org/Publications/Public/FTT/11-4071_EFAMA%20submission%20on%20Commission%20proposals%20on%20FTT.pdf)

We believe that the period from 2008-2012, which saw the most severe financial crisis for 80 years, is too extreme a sample period to be wholly representative. We believe the analysis that the EBA intends to undertake would deliver most meaningful results if the data sample covered a full economic cycle. This, in theory, suggests that the data period should cover the period from early part of 2000 to 2012. This will result in measuring the change of the liquidity of assets (their delta) and the point at which their liquidity changed. This can be instructive around the correlations of the liquidity of assets to events (e.g. what "event" caused an asset to become illiquid). Any inability to cover a full economic cycle will cause possible aberrations and misleading results owing to the following reasons:

- data limited to only the last few years reflects a certain point in the economic cycle that has coincided with periods of extreme market stress;
- different assets react differently to periods of stress and a larger data sample covering a longer period enables comprehensive assessment; and
- the functioning of the entire financial sector was seriously affected during this same period, thereby distorting the trading performance of many financial instruments

It is also important that the EBA uses a consistent time period for all instruments. For example, it should not use a certain time period for one asset class such as securitisations and other time periods for other asset classes such as sovereign bonds, corporates and covered bonds. While a longer data sample period is clearly the preferred outcome, it is important to understand the challenges in securing this information. While some sources, such as MiFID, contain centralised data these have come into being in the wake of the recent crisis. This suggests that it will not be possible to locate one centralised source for data covering the period before 2008.

The fundamentals of the ABS market over the past few years provide useful insight into a relevant data period for objective liquidity assessment of this asset class. The liquidity crisis in the ABS sector was largely precipitated by the forced unwind of leverage from the shadow banking system (for example, Structured Investment Vehicles or "SIVs"). Such structures are no longer viable and this experience is unlikely to be repeated due to the effect of new regulation. The European ABS market normalised from mid/end 2009 with an increased focus on funding real economy assets through simpler, more transparent structures and with a buyer base composed wholly of banks and real money investors. The market has also been fundamentally changed by a wide range of regulatory initiatives including significantly increased transparency, as well as the requirement for issuers to retain a certain net economic interest in transactions. **It is also essential to remove all historic data related to structures and products which will not comply with risk retention requirements imposed subsequent to the crisis, and will therefore be ineligible for investment by banks (and other regulated investors).**

It is therefore important to properly delineate between the non-functioning market experienced during the liquidity crisis and the properly functioning market observed since late 2009. We are concerned that a comparison of the market today with immediately prior to or during the crisis is fundamentally flawed and reliance on data generated solely during the crisis period will skew the results adversely to render any results meaningless. Additionally, we do not believe that trading information required to calculate the liquidity metrics outlined in the DP is available in sufficient detail, and the appropriateness of such data may be limited by significant market events.

We further appreciate that the EBA, as part of this exercise, may wish to conduct independent dialogue with market participants (investors and traders) to establish the ability to sell an asset quickly which is of high credit quality, noting that any price volatility is reflected in the haircut of a repo transaction. **The industry strongly recommends that the EBA focuses its research on the ability to liquify assets**

quickly which are of high credit quality, rather than define liquidity on how often a security trades.

Q2. Do you have additional data sources to suggest? Specifically can you suggest a source of repo data and gold that would fit our needs?

Fixed Income Market

It should be noted that many fixed income markets are currently OTC, although this is likely to change after MiFID II is implemented. The industry is supportive of carefully calibrated post-trade reporting delays which are developed for each specific asset class. AFME would be happy to provide a presentation to the EBA on its proposed post-trade reporting transparency project, which covers a wide variety of fixed income asset classes.

Market information is available from a number of market sources including:

- Individual dealers (with the data necessarily being confined to the transactions participated in by such dealers);
- Bloomberg;
- Xtrakter's XM2M and XVOL price and volume (respectively) data;
- Markit (including the Totem service); and
- Other third party market data providers and services, particularly those covering non-European currency assets.

No single data provider offers a complete picture and therefore, there is an inherent limitation to the aggregation of such data in that it is impossible to determine what has not been included. For example, Xtrakter (a former Euroclear company that is now independent) is a voluntary service with no mandatory requirement for contribution. Furthermore, participants are not required to provide data in order to receive consensus data in return. Therefore, it is important to recognise such limitations and try to utilise multiple data sources in aggregate to generate a complete picture.

Generally, we recommend using existing market/ regulatory initiatives, such as the ongoing European Repo Council collaboration with the ECB and Bank of England, for consistency and efficiency of collation. We believe that more rigorous repo data will be important and the following sources can also be considered:

- Clearinghouse exchanges doing repo;
- International Capital Market Association (**ICMA**) repo market survey conducted semi-annually (http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/short-term-markets/Repo-Markets/repo/latest/);
- Tripartite repo agents;
- Tripartite counterparties if there is a history on the haircuts applied to different asset classes;
- Individual banks may have collected high level repo data; and
- National regulators, particularly the Financial Services Authority (**FSA**), which should have now collected large volumes of data through banks' regulatory reports or information gathered from onsite-SLRP reviews.

We recognise that the repo markets tend to be quotes-based but exchange and tri-party quotes are sourced from more than just one dealer, thereby adding credibility to the framework.

Equities Market

We understand from the DP that the mandate of the EBA includes examination of the liquidity of equities in a European context. In this respect, we would like to make use of some work done in conjunction with the Institute of International Finance (**IIF**) around classification of equities under LCR, as well as their consideration of two fixed income asset classes (corporates and covered bonds, but not sovereigns or securitisations).

There are some fundamental differences between the characteristics of fixed income and equities markets which have different implications for liquidity. These are outlined below:

	Equity	**Corporate/Covered Bonds**
Market Structure		
Liquidity of market during normal period	Highly liquid	Highly liquid
Liquidity of market during stressed period	Liquid, across most equities	Somewhat liquid
Number of liquidity providers	Extremely high	Extremely high
Trade structures available to monetize assets	Multiple	Principally repo
Asset Characteristics		
Transparency of asset price	Good and Intraday	Good and Intraday
Transparency of asset liquidity	Good and Intraday	Good and Intraday
Traded volume of asset during stressed period	Very high across most equities	Volatile across asset class
Risk Characteristics		
Exit strategy / time to liquidate asset class	Quick to sell asset	Potentially unknown liquidation period
Diversification of collateral basket	Extremely high, with limited exposure to any single name	Moderate, with potential to have high exposure to any single name
Geographical diversity of collateral basket	Typically global	Typically region-centric

Source: IIF Liquidity Working Group, June 2012

Some important conclusions were arrived at:

1) Cash markets for equities that are constituents of major indices have:
   a) transparency attributes that often exceed those of many fixed income instruments. These attributes derive from being listed and traded on regulated exchanges and include: i) instant price discovery, ii) public availability of intraday pricing, iii) observable bid-offer spreads, and iv) third party review and widely understood eligibility criteria; and
   b) market structure attributes and transaction volumes in both normal and stressed environments that compare favorably with other fixed income assets.
2) Equity securities-financing markets are a primary source of liquidity for major market makers

a) As a result of the transparency and market structure attributes of the cash markets, the securities-financing markets of prime equities are a substantial source of liquidity;
b) Empirical evidence indicates that main index equity financing markets proved resilient during the recent crisis; and
c) Extremely liquid futures markets, and OTC markets, provide additional funding sources.

More specifically, the types of data obtained and the available sources used in the IIF analysis are outlined in the table below:

Types of data obtained	Available sources
• Movements in major market indices • Movements in futures market • Average monthly turnover • Collateral value • Haircut on securities financing • Price volatility	• Bloomberg • Central banks • Independent surveys sponsored by central banks • Tripartite agents

Gold Market

While we cannot confirm the actual breadth of data being available for gold, the following sources are available:

- The London Bullion Market Association (**LBMA**), via the link below:

http://www.lbma.org.uk/pages/index.cfm?page_id=50&title=clearing_-_statistical_table; and

- Bloomberg providing data on gold futures dating back to 1975

Q3. Do you agree with the list of liquidity metrics under consideration to be used in the EBA assessment, as mentioned in this section and Annex 5? Can you suggest further metrics the EBA should make use of, where information would be available?

We would like to make some important observations prior to examining some of the proposed liquidity metrics.

Liquidity is demonstrated by the ability to refinance. Market trading is only one method of refinancing. Other methods typically also include the interbank market (repo, conduit, etc.) as well as the inherent ability to sell quickly high quality assets such as covered bonds and high quality securitisations. Trades executed interbank are private by their nature and will be bespoke to the counterparty and collateral. No generalisation can be made in this respect. If both the public markets and the interbank market are unable or unwilling to provide finance, the central bank is the last resort for liquidity.

If the EBA needs to rely on publicly available information which can be applied generically and consistently across all assets, this will be problematic and difficult to achieve. It will also fail to take into account the qualitative nature of the collateral.

We also feel that the EBA should make certain obvious exclusions. For example, the EBA should ensure that structures that cannot be purchased by EU banks because they do not meet European requirements for risk retention are clearly excluded.

In terms of sharing our views on the proposed liquidity metrics, we would again like to draw the EBA's attention to the relevance of the secured funding markets to liquidity. The liquidity characteristics/ metrics must fundamentally relate to the secured funding markets as source of necessary liquidity. A prudent basis for segregating the securities will be to identify those that are central bank and/ or counterparty clearing house (**CCP**) eligible (reflective of high liquidity and credit quality) and those that are not. Once this initial split has been achieved, the key metrics to assess liquidity of the individual security in secured funding markets (possible through a simultaneous comparison with the activity in the cash market) can be:

- Measure of market depth (consistency of value of trades outstanding over the period for which the data is available); and
- Haircut/ margin requirement by tenor over time

We have also closely examined the liquidity metrics that the EBA has proposed. The following table contains our comments on some of these:

Liquidity metric proposed by EBA	Comments
Minimum outstanding volume of the assets	Care will need to be taken in the application of this information. For the purpose of calculating relevant ratios, use of outstanding volumes is not very relevant or helpful. In order to achieve a measure for liquidity, "free float" remains a much more applicable metric. However, data for free float of fixed income instruments is not available thereby constraining interpretation of relevant ratios. Equities are quite different - information on free float is available.
Proven record of price stability	Historical data in certain asset classes will not be relevant in terms of price performance. It will be important to delete from the EBA's data study those products which can no longer be purchased by European banks such as US subprime or CDO squared. It will also be useful to understand the reasons driving price stability of a particular fixed income instrument. It could well be that the stability in price is a result of limited trading. Or, it could be because investors have a buy-to-hold strategy for an asset that would otherwise be actively traded. Therefore, a variety of factors could explain price stability and each of these may have varying implications for liquidity.
Maximum bid/ask spread	**Bid/ask spread has proved to be of little relevance in fixed income markets.** This is because it is often difficult to achieve a "like for like" comparison in fixed income. A certain asset class can have multitude of individual assets with slight modifications in terms of maturity, attached coupon etc. Even if exactly the same instrument was under analysis, differences in volumes could also drive bids and asks. Hence, a bid on a particular security for a certain volume on a particular date may not be entirely comparable with an offer on the same security at a later date for a different volume. This aspect again explains the heterogeneity of fixed income instruments. Furthermore, we would like to highlight that a brief review of the literature on Roll (1984) as a method of deriving these spreads has shown that Roll's method of moments spread estimator has performed poorly. It has generated a large proportion of undefined spread estimates even for daily equity

Liquidity metric proposed by EBA	Comments
	datasets. Roll also produces biased results as a result of Jensen's Inequality. There may be value in pushing for more detail on how spread estimates are to be derived, as there have been refinements to Roll since 1984.**Those securities with historically high bid/ask spreads should definitely be considered for inclusion in the liquidity buffers, however, the haircuts on certain instruments should be analysed further if the perceived bid/ask spread is wide.** Bid/ask spread is of much greater value in the case of equities which have a greater degree of homogeneity.
Remaining time to maturity	Remaining time to maturity impacts liquidity but is not necessarily a measure of liquidity. The propensity to trade changes as the remaining time to maturity reduces for those fixed income assets held by buy-to-hold investors.
Minimum turnover ratio (trade volume / outstanding volume)	This ratio is only effective if free float information is available and outstanding volume data cannot be used as a proxy. A dominant presence of buy-to-hold investors makes the link between outstanding volume and free float very tenuous in the fixed income market.

The table below provides some additional liquidity metrics and the accompanying rationale:

Additional liquidity metrics	Rationale
Ability to liquify high quality assets quickly	**Many credit products such as sovereigns, corporate debt, covered bonds and securitisations simply do not trade often for a variety of reasons, such as them being purchased by buy-and-hold investors. It is essential that the EBA evaluates the ability to sell a high quality asset quickly.**
Frequency of trade	It is important to use trading frequency as a separate liquidity metric in the case of fixed income securities. Unlike equities, there is not a direct relationship or proportionality between volume and frequency.
Investor type	This will establish liquidity for assets on the basis of which investors predominantly purchase them. For example, most ABS is purchased by investors with a buy-to-hold strategy and are therefore less liquid. The EBA may consider undertaking a survey in this respect.
Issuance size	As part of AFME's study on post trade transparency framework in the context of MiFID II, issuance size was deemed to be an important factor when considering secondary market liquidity. At the asset class level, government bonds generally had the highest level of trading in terms of volume and frequency. The average issuance size of the government bonds sample was €15.1 bn with a distribution of ±€8.4 bn (Q1 2011, Source: Xtrakter).
Central bank eligibility	As indicated earlier in this letter, the eligibility of an asset for purposes of central bank liquidity is a reliable test for liquidity.

Q4. Do you agree with the list of explanatory characteristics whose linkage to liquidity is proposed to be tested in the EBA assessment? Can you suggest further characteristics the EBA should assess?

Views on list of explanatory characteristics

We believe that the list of explanatory characteristics around market structure and assets is reasonably comprehensive. We would like to emphasize the need to have a large universe of buyers to offer protection in periods of market stress. They key factors influencing buyers to purchase assets include:

- Confidence in their own balance sheet;
- Confidence in the liquidity of the asset they are purchasing; and
- The asset does not impinge upon their own ratios, for e.g. RWA ratios and any cap associated with liquidity ratios.

It therefore, becomes important that these buyers are not experiencing the same degree of stress as the banks.

Suggestions for further characteristics that the EBA should assess

Further Characteristics	Description	Proposed calculation
High credit quality	Can be measured by investors and traders directly, or also through ratings. Certain exceptions to direct correlation between credit quality and liquidity should however, be noted here. A very active market exists around highly distressed credits, e.g. junk bonds, Greece Credit Default Swaps (**CDS**) during Eurozone crisis. Also, in the event of a CDS default, there is an artificial demand for deliverable bonds, particularly those in short supply.	EBA to develop a list of high quality assets based on actual asset credit performance and possibly other factors such as ratings, which should be limited to AAA and AA
Share of aggregate repo market during stress	Measures the robustness of securities financing markets during stress	Repo volume as a percentage of total repo market during stress conditions
Changes in credit lines	Reflects the reduction in outstanding credit lines during stress period	Percentage change in size of credit lines
Change in secured financing haircuts during stress period	Captures any increase in secured financing haircuts during a designated stress period	Percentage change in secured financing haircuts
Repo market acceptance during stressed conditions	Fluctuations in the number of counterparties that accept collateral during 30 day stressed period	Percentage change in counterparties accepting assets as collateral from major repo agent banks during stressed period
CDS spreads		Market data providers

We would like to use this opportunity to highlight some specific characteristics of the former Northern Rock Granite programme which will help set in context the need to consider certain other explanatory variables in order to capture the entire range of the fixed income spectrum. The Granite programme is by some distance the most liquid name in the ABS market and very much the primary reference point for all

market participants in terms of pricing and market sentiment. Despite this, the initial Basel proposals would seemingly exclude Granite from consideration as a liquid asset due to the original LTV parameter.

Likewise, due to the historical reference in the Dutch mortgage market to LTFV[4] together with structurally high LTV ratios resulting from the tax deductibility of mortgage interest in the Netherlands, the entire Dutch RMBS market would seemingly be excluded as well. We would therefore caution against the use of blunt measures which can exclude a very significant portion of the liquid, high quality market. A more prudent approach may be to give consideration to a combination of key characteristics including LTV, delinquency performance and credit support. In this scenario, while Granite's original LTV may exceed the threshold, strong delinquency performance and sufficient credit enhancement/other credit protection would still characterise it as a high grade asset.

Q5. Do you agree with the methodology proposed? Do you have alternative approaches that might be used?

Views on methodology proposed

A formulaic approach to fixed income assets, particularly covered bonds and ABS, is difficult due to the lack of public data. We believe that this can complicate implementation of the proposed methodology. We recognise that use of a formulaic approach may not be totally dismissed, however, a simpler and more intuitive test of liquidity should be applied to screen the numerous assets. Some form of formulaic approach, similar to the one the EBA has envisaged, could then be applied to those which did not clear initial liquidity screening. We feel that the proposed EBA methodology may not be possible to fully calibrate in the time frame for the EBA's work. It would also meet with significant resistance by the financial markets as proprietary and bespoke.

Alternative approach for securitisation

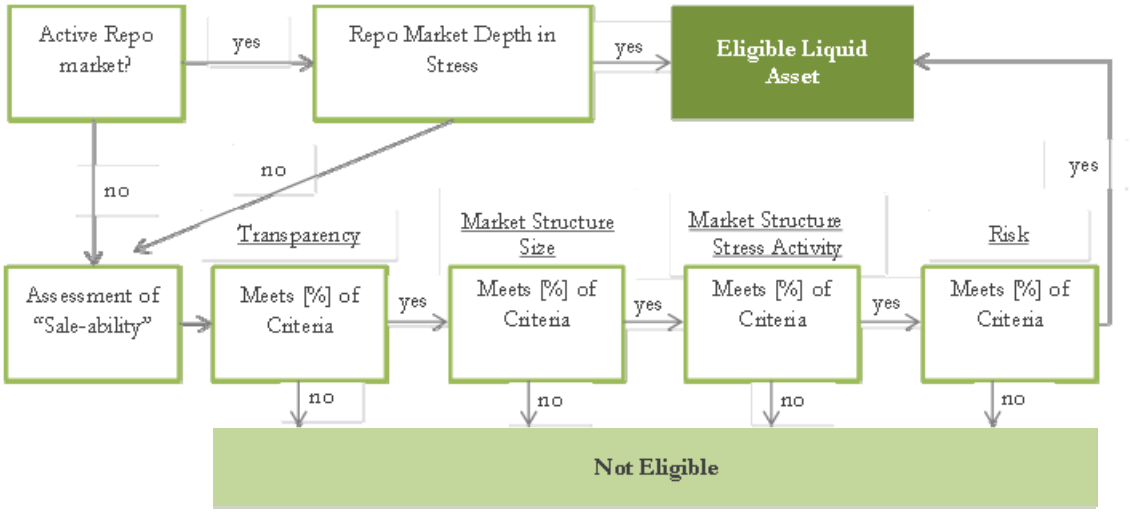
During the development of the European industry's PCS initiative, a similar process of review of empirical liquidity metrics was undertaken, with this process highlighting certain inherent limitations of reliance on quantitative liquidity metrics. The conclusion of the PCS process was to apply certain qualifying criteria to differentiate high quality assets (which in turn are those with higher liquidity). In the same way, we would very much support a qualitative approach to determining liquidity by reference to certain key eligibility criteria, with the PCS criteria or ECB eligibility being a sensible starting point which could then be extended to other high quality corporate and consumer assets. In times of severe liquidity stress, when even the repo market is no longer available, all liquidity passes through the central banks. This means that assets which are central bank eligible for funding are able to be refinanced, but at relevant haircuts. The haircuts take into account the specific credit quality of the particular fixed income instrument, performing an important qualitative assessment. Otherwise, a mechanism would need to be developed using public market trades (secondary and primary), bank repos, banks secured financing, conduit financing and other bank financing, which differentiates clearly between the collateral type/counterparty strength.

A further variation of this approach is described in Figure 3. A decision tree is employed that can use repo eligibility as a basis for the initial screening of liquid assets. A further test can be applied on repo market depth where credit risk and price volatility against a benchmark can be measured as qualification

[4] Loan to Foreclosure Value

criteria. If the asset fails the repo market test, it will be put through the formula based model to ensure it meets designated thresholds of transparency, market structure and risk.

Figure 3: Decision Tree



We should mention that while this decision tree approach simplifies the test by separating the more obvious liquid assets and still maintains features of the formulaic approach, its development within the EBA's timeframe could be challenging.

Thank you once again for the opportunity to provide comments on the DP. Should you have any questions or desire additional information regarding any of the comments, please do not hesitate to contact Richard Hopkin at richard.hopkin@afme.eu or on + 44 207 743 9375 or Mark Bearman at mark.bearman@afme.eu or on + 44 207 743 9356.

Yours faithfully,

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