This letter has been written by Anthony Issa, Treasurer at an APRA regulated ADI, and I thank APRA for the opportunity to provide this response. Within this letter, I provide feedback on the currently exhibited draft APS 210. It organically considers other prudential standards, both draft and current into a holistic approach to ADI regulation and supervision.

My employment currently is with a locally incorporated ADI operating under the MLH liquidity regime. Whilst the ADI that I work for is small, but not customer owned/mutual bank, I write this feedback letter drawing upon varied experience having worked in a range of small and large locally incorporated, subsidiary and foreign branch ADIs. As such this feedback is presented from a broad perspective based upon my overall experiences and interactions with the market as a whole, and aims to offer suggestions that can make all ADIs and the industry more robust ahead.

Background:

APRAs presentation of the draft APS 210 is a timely opportunity to review the regulatory liquidity framework within Australia. It comes after Silicon Valley Bank's (SVB) demise and should be taken as a chance to further broaden and deepen the market which makes ADI participants more robust, rather than shrink or weaken it/them.

There are organic and initial differences between the neutral broad based regulatory supervision across all ADIs that helps APRA to ensure a SVB style event would be rare here. Whilst a review is prudent and timely and I do concur with aspects of what is proposed, there are some things to note that prudential banking oversight in Australia is far different and I would also say superior, than what SVB was under.

SVB considerations:

SVB was a different situation and in some cases unique. Some high-level observations note:

- They did not have adequate deposit/in-flow monitor or dashboarding especially around concentrations and large exposures and were susceptible to key large, related deposits
- They appear not to have had regular stress testing on their portfolios including their HQLA
- They appear to have limited cashflow forecasting and forward preparedness
- They appear not to have used repo or other liquidity options/contingencies but sold their HQLA
- Their HQLA was predominately long-term fixed rate government bonds

These issues were naturally exacerbated by the movements in market rates, but when considered objectively, the main issues and causes are neutral to market interest rates. They relate to a robust risk monitoring framework which was actually the problem (cause) rather than the losses incurred on selling their bonds (effect).

Sound Liquidity Objectives/APG 210:

Approaching robust liquidity is well presented in the current/draft APG 210, which outlines common themes and objectives for the industry (regulators and ADI participants) to follow. However, upon closer examination, it can be seen that the proposals within the draft APS 210 actually clash with the objectives expanded upon within APG 210.

For example:

Paragraph 7 of APG210 notes such things as:

- Diversification of liquid asset portfolios
- Liability diversity
- Managing maturity mismatches

Unfortunately, I see some of the proposals within this draft APS 210 working against these objectives rather than aiding or enhancing the objectives:

- Liquid asset portfolios will become less diverse and narrower: removing bank security as an eligible HQLA class and forcing majority government bond holdings
- Liabilities will become diverse and more concentrated: the unintended consequence of removing bank securities as an eligible HQLA class means there will be implications and limitations for smaller banks to issue securities for liabilities, as such smaller banks will be fighting to source from term deposits and rely mainly on this type of funding
- Will add more reliance on short term funding: term deposits are mainly 3-12mths, there is limited volume to assist maturity mismatch against longer dated assets. Security issuance is often used to gain longer term funding.

Further, paragraphs 87-91 of APG 210 relates to liquid asset diversification, however the draft APS 210 will see ADIs holding a less diverse HQLA portfolio and then possibly needing to sell such at the same time. The objective of the APG and good liquidity risk management comes from a broadened holding base.

<u>Considerations:</u>

I summarise the points for APRA to consider into the following broad categories which I will expand upon further thereafter:

1) Liquidity risk management frameworks
2) HQLA definitions
3) Industry congruency

1) <u>Liquidity risk management frameworks:</u>

The learnings and lessons of SVB reinforce the need and value of having a robust risk monitoring framework. This involves many aspects and something that I have found lacking/not consistent across the industry. As part of its current considerations, I suggest to APRA to uplift the following across the industry. Much of this is not new but needs to be re-checked and understood and should be first port of call for APRA.

A key lesson learned is the importance of reports/monitoring/dashboarding (hereafter may be interchanged). this is important at the in-flow stage as well as the out-flow.

There are two aspects to this.

Firstly, having the dashboards and what they contain and related aspects,

Secondly, having independent front, middle, back offices (also referred to as three lines of defence).

These two points I feel are within the opening qualitative pages of APS 210. Unfortunately, what I have observed is a disparate range of reports ADIs have, who/how they are compiled, how they are reviewed and what call out channels are available.

Dashboards:

To begin with, I suggest that a deep audit is conducted of all ADIs, starting smallest to largest, to review what dashboards they have, their method of creation (manual or automatic) and whether they are independent of the front office. Best practices should have such reports from coming from the middle office that is independent of any trading/treasury and settlements/operations function and preferably separate from financial reporting. Where possible, the reports should be robust that they can be generated in a timely manner (end of day working towards real-time) with minimal human intervention, even from remote locations during an event of crisis/business continuity.

The Australian financial landscape is at risk if there are ADIs operating that cannot meet the above. At a minimum, participants should be equal to know that all banks can monitor their balance sheet and there are appropriate board approved limits and parameters with warning relevant indicators/traffic lights set. APRA should cross check the information an ADI can produce and ensure there are adequate thresholds set for various positions, products and events, and that there are independent avenues for staff to call out anything that may be triggered.

Underpinning the above, there needs to be an in-depth survey and then review of the risk and treasury systems used by all ADIs. Many don't have full systems and even when they say they have a system; it doesn't mean they have bought or activated all the modules or are using them correctly/aligned with front-middle-back office segregations. Many staff and senior executives/board members wouldn't be over the reports and most systems use delayed or varied/incomplete data/feeds/market pricing. Some ADIs don't even use or have fully configured these report modules.

Regular stress testing /dashboarding on capital 'hypothetical' or through P&L/capital have the same result. Monitoring changes to capital of for example a 5% variation should trigger an ALCO meeting. The issue is having the framework: summarised as monitoring and dashboarding, independent middle office, timely/frequent reports, not the product, e.g. bank FRNs vs govt bonds. SVB did not have the framework, even though it had the government bonds.

It is unfair to compare SVB and the mutual sector just because they are not large in their respective jurisdictions. The commonality to be learned is the importance of monitoring and setting parameters starting with when the deposits and funding come in. APRA should work with the smaller ADIs to ensure there is a minimum level of information garnered about funding with appropriate indicator thresholds set and overlays with stress/what if scenarios. Related party or one obligor deposit concentration monitoring would have given SVB risk insights much earlier on. Once the incoming funds are understood, a total liquidity picture can be painted about the outflows thereafter.

Such stress tests are invaluable also for such things as interest rate sensitivity. Had SVB been regularly hypothetically stressing its HQLA portfolio on 'what if rates rose' scenarios, it would have observed early on to the possibility of declining valuations and the impact against capital. Again, I suggest that APRA work with the industry to ensure that all ADIs have some level of common stress testing, including sources, frequency, generation and distribution so that warning indicators pick up issues long before they could eventuate.

In addition, APRA should work with the industry to ensure there are common timeframes of calculating such things as capital and liquidity, I have heard a range of times across ADIs from end of

day/week/month. Such things need to be tightened so that there are no different understandings and there is a mutual safe approach in the industry that each participant is monitoring its key positions and values at the same time in the same way. New ADI licence applications must show their intended dashboard reports and ensure that they cover all the minimum observation points to uniform the industry.

Segregations:

As noted, the success of a resilient banking industry is the sum of the parts of each ADI having robust frameworks. ADIs cannot truly have robust frameworks if their reports are inadequate but also let down by their organisational charts/structures not having true segregation of duties. There is a greater risk of lack of segregation of duties for example between risk, finance, operations and treasury departments than there is of mark to market prices of HQLA holdings. I have witnessed overlap in many banks across these departments and am reminded that Barings Bank was collapsed by Nick Leeson not because of his actions, but because there were no segregations.

Naturally due to their size, the smaller MLH banks have limited staff to fully create robust segregated departments, but each ADI must ensure they have adequate controls in place. Many of these banks don't have a defined middle office and reports are manual often done by the users themselves. There is a need to fully audit in depth the functions and roles of staff against things like tasks, system access, bank account authorities and signatories to ensure each ADI is operating robustly.

For example, in general, treasury department should not report to finance department. Treasury should have payment authority but no capabilities. Finance department should not be doing risk and middle office reports if they are also facilitating payments, confirmations and settlements. Operations department should not be compiling any reports or data and should have clear delineation between their instructions and their processes, ensuring reporting lines are also separate. Naturally, staff in each relevant departments should have the necessary accreditation associated with their roles.

ADIs must demonstrate to APRA how all their data is consolidated, for e.g. how do retail products and treasury data come together to form a robust cashflow horizon report and other dashboard outlooks. My experience is that many organisations lack a data warehouse where such information comes together and from where reports can be generated independently thereafter.

2) HQLA definitions

HQLA is often colloquially defined as cash and or cash equivalents. The 'equivalents' are included because they can be liquified quickly, often through different channels without necessarily disrupting the market.

I feel there is a mix up of terminology between LCR, MLH and HQLA over the years. HQLA is the underlying holdings of cash and equivalents; MLH/LCR are frameworks for measurement. This should be reinforced within the standards/practice guides.

One of the issues that I have observed is not in the liquidity regimes, MLH or LCR. It is in the different HQLA definitions between the two methodology regimes. This is a starting problem for Australian liquidity risk frameworks.

As an example, two banks could be serving the same customers in the same products, side by side in the same locations, but have different HQLA holdings. How can one bank have an asset that is HQLA but another bank not, i.e. a different definition of what is a cash equivalent? This presents a degree of HQLA arbitrage which upon my international investor meetings has dumbfounded many counterparts

along with why there are forms of HQLA eligible in other jurisdictions that are prohibited here. This is not to say two banks cannot have different frameworks/formula of their liquidity requirement measurement, i.e. 31 day template vs numerator/denominator ratio. The different methods reflect the difference in size, sophistication and capacity to run the different models but at least they should have the same HQLA definition.

The proposal in the current draft APS 210 to remove bank securities from eligible HQLA for MLH banks I feel further compounds and confuses the problem.

The better approach is to have one standard common definition of HQLA for all ADIs in Australia that underpins either measurement methodology prescribed (LCR or MLH).

I suggest this common HQLA definition to be:

(a) Notes and coin and exchange settlement funds;
(b) Commonwealth Government and semi-government securities;
(c) Debt securities accepted for repurchase agreements as eligible securities by the RBA;
(d) Any other securities approved by APRA

To ensure the principles of the LCR are maintained, limits should be applied as:

- LCR Banks: no less than 70% of the required HQLA holdings are to be from category (a) and (b)
- MLH Banks: no more than 70% of the required HQLA holdings are to be from category (c) and (d).

This universal HQLA definition with a '70% rule' works to strengthen the industry in many ways making the overall system and each participant more robust and resilient as outlined below. It removes disparities amongst banks working to further harmonise to internal understandings of HQLA.

<u>There are a few things to unpack about HQLA and the draft APS 210:</u>

- <u>Government securities</u>
- <u>Removing bank securities</u>
- <u>Keeping bank deposits</u>

<u>Government securities:</u>

The proposal to remove bank securities as HQLA for MLH banks is in effect a push for their HQLA to hold more government securities. It must be explained that pushing MLH banks into government-based bonds (either Commonwealth or Semi-government) doesn't suit MLH banks.

Government securities are majority long dated and fixed rate. Ironically these factors caused the losses for SVB. MLH banks mainly offer vanilla retail products on floating rate basis. They are ill-equipped to purchase and own government securities, preferring shorter dated Floating Rate Notes (FRN) securities. MLH banks don't have the portfolios of fixed rate products to organically hedge such securities and though such things as Interest Rate Swaps (IRS) can be used, not all MLH banks are equipped for these derivatives (as outlined following) and so again this change in the draft APS 210 actually works to weaken the ADIs and industry rather than making it more robust and resilient.

Whilst some state governments have issued FRNs, they are irregular in issuance, not the preferred form by the issuers and significantly over-subscribed when executed. Similarly, Commonwealth Government T-Bills/Notes are oversubscribed, often A$5bln in orders to A$1bln issued.

Note also that whilst semi-government CP etc exists, they are irregular issuers and so this cannot be relied upon to satisfy MLH bank needs under the draft standard. It also might seem odd, but my

experience has shown me that not all banks in Australia have in their approved policies/procedures the ability buy such inscribed stock or AONIA issuance. I suggest that APRA as part of its in-depth reviews noted earlier survey thoroughly what ADIs can currently hold and if there are any restriction on the issuers/type/tenor etc.

What makes government securities appear 'safer' is their liquidity because a large number (including global) participants trade them. Government securities are given this liquidity not because the government has to step into buy its bonds, but because other buyers step into back stop when they see value. Government securities are subject to price volatility and though have less credit risk component than say a non-government FRN, the fixed rate nature of the government paper can cause gyrations greater than that of FRNs with credit risk. The liquidity as mentioned in government paper is because there are more participants having to hold the securities as an approved product under their policies. What can be deduced here is that increasing the number of participants and turnover leads to more liquidity and a more resilient market. On the surface, forcing more banks to hold more government securities will add to their liquidity, what it does on the other side is weaken the non-government bond market by removing participants and turnover.

Whilst the MLH sector is not large by volume in the bond market, it is a component, nonetheless. Proposals such as the draft APS 210 should consider their implications to the overall market and Australia's turnover globally. The suggestion I have outlined above in the universal HQLA definition enhances the number of participants and volume turnover in the Australian bond market by universally including all ADIs. There will be more buyers and more sellers across more lines uplifting the industry and making everything more resilient but not forgetting that HQLA portfolios themselves will become organically more diverse which is a key objective of the liquidity framework here as outlined in APG 210. In short, the proposals in the draft APS210 shrink both the diversity holdings of HQLA and narrow the market, compared the above HQLA definition which simultaneously increases both the HQLA diversification and expanding a more resilient marketplace.

This approach should not just be considered for the MLH ADIs. There is a significant benefit to the large LCR banks also as they diversify their HQLA (with limits up to 30%) away from single sovereign to across a vast multitude of issuers and types of bonds, including covered and SSA bonds which aligns to their global peers.

<u>Removing bank securities:</u>

There are some issues to consider in the proposal to remove bank securities from the HQLA definition as proposed, including unforeseen repercussions, for both the asset and liability side of the balance sheet for ADIs.

Part of issue I feel is a misunderstanding about bank securities, their operating behaviour and risks.

I concur with the objectives of sound liquidity across the industry to work towards minimising contagion risks. Unfortunately, I feel that a run on the bank is more prevalent in the proposal keeping bank deposits as HQLA and removing bank securities. Bank securities are far less risky or related to runs or contagions.

There appears to be an angle within the draft APS 210 that bonds are to blame or are the fault of SVB and are a concern for liquidity, especially for the smaller ADIs in Australia. This is in effect blaming the product, namely securities. As highlighted throughout this letter, the problem is not the product, it is not having a robust risk monitoring framework. Without this, the ultimate risks would still be there, and the same outcome would happen no matter the products. Agreed, the timeframe or extent might

be different in holding funds in cash accounts vs. bonds, but a poorly observed and managed bank would eventually fail. What needs to be better understood is the current approach drafted prohibits bonds but maintains bank deposits, including term deposits. This is incorrect as deposits are not a reliable form of HQLA and should be removed and that bonds offer more benefits and should be included.

It is misconception that selling bonds cause a run on a bank or contagion to other banks. They do not.

To begin with, often an issuing ADI may not know who has bought their securities. Whilst there are direct dealings in the case of things like NCDs, in other security products they are often dealer arranged and the end buyer is not known. As such it must be understood that there is limited recourse to the issuing bank when they initially did not deal with the buyer.

Buyers of securities know that their liquidity is not to the issuing bank, but through such things as repos, securities lending or trading houses. This is an important distinction in that compared to bank deposits which are direct, secondary trading of bonds is detached from the issuers and there are multiple price making trading houses around the world, many of which are not fellow ADIs.

In fact, three of the largest secondary security trading houses in AUD securities; TD Securities Asia, Mizuho Securities Asia and Barrenjoey are all not ADIs, and two of them are not even based in Australia.

Issuing banks are under no-obligation to buy back their own paper. This is addressed within the prudential notes but what may not be fully understood is that lead managers undertake to attempt to provide secondary liquidity in the securities they sell as part of being appointed. Lead manager issuance fees cover part of this service and many issuers, including Australian Government agencies (Commonwealth and State) make it a pre-condition to be initially appointed to the dealing panel. As such it is rare that an issuing bank would even be approached to buy its own paper back.

It is for this reason that an LCR bank issuing securities through a lead manager panel does not have to include an amount for possible buy backs of those notes in their modelling. It is simply not on the account for the issuing bank to buy back, it is firstly for the lead panel.

Issuing banks may want to or choose to buy their paper back (directly or brokered), but this is distinct from having to. There is a misconception that an issuing bank must buy its paper back, and to do so may liquidate other paper it holds to do so, thereby possibly triggering contagion. This is not the case. There is no contagion as initially each buyer must be able to afford to purchase it. If not, the seller keeps looking for a buyer and if the securities are defined as HQLA as suggested in this letter, then there will be more buyers happy to consider it, not counting other options such as repo. Further, as there are more participants and volume in the securities, it brings in broader participants who further enhance the system such as fund manager, offshore banks and family offices, superannuation and pension funds or even the RBA operating commercially themselves. Securities adjust their price and eventually provide liquidity to the holder in the marketplace, especially a marketplace that has been expanded.

Furthermore, there are electronic trading services such as but not limited to Yieldbroker, MarketAxess and Bloomberg that even offer global anonymous trading. Again, holders of bonds can sell anonymously not knowing their buyers that has nothing to do with the issuing bank, there is no contagion and this is safer HQLA than an ADI holding a deposit that it seeks to access in times of need. This secondary trading of bonds happens in billions of dollars each day as part of the normal course of

operations for the bond/money market…it does not cause contagion nor are original issuing banks the wiser for even knowing participants have trades their once issued securities.

There is a misconception that there is extensive cross ownership of securities amongst MLH banks and this may cause contagion/a run. I would argue that there is more cross ownership and risks amongst the LCR banks, (and across similar institutions of other financial industry participants) but overall this aspect is well mitigated. Firstly, it is mitigated as noted above through the operating mechanics of secondary trading. Secondly, large exposure requirements limit such cross ownership. Thirdly, the universal HQLA definition suggested above ensures that this probability is further minimised as now ADIs have a broader range of eligible HQLA to choose from. Overall, the extent and risks of 'peer support' amongst MLH bans is exaggerated.

Yieldbroker has worked extensively on secondary trading of NCDs including for non-prime NCDs. The industry and prudential standards should take this opportunity to further expand and enhance the products and marketplace rather than limit it.

The essence of a safer system relies upon securities remaining within the HQLA definition and broadening it to capture more, both securities and participants. This will make Australia more resilient as assorted buyers step in when prices are low, they cannot if they are restricted. Further, this approach actually works in harmony with APRAs other regulatory oversight to such participants as the Superannuation and Insurance industries as they are also holders of securities and need a deeper, stronger more resilient bond market and liquidity. In time, APS 210 could evolve into a CPS covering liquidity for the broader industry rather than just ADIs. As such the suggestions in this letter help to take the first step to ensure there are common definitions and practices and that all entities are equally accessible which overall will uplift operating resilience in both going concern and stressed times.

It has been noted by APRA in the consultation documentation that there might be some lost profits for MLH banks ahead if the draft proposal carries through. For most MLH banks, especially the Credit Union/Building Societies it is not for profits sake. Most mutual based ADIs don't primarily seek profits, but their HQLA management under the MLH regime supports them to be profitable and therefore offer competitive pricing and return surpluses to community events. More so, their retained profits act as one of their few sources of capital to further grow. As simple as restricting their HQLA has flow on effects that will suffocate their value proposition, place in community and opportunity to future growth and being viable and relevant banking alternatives to the main banks. In the case of the bank that I work at, the loss is estimated at 1 percent.

There are also other unintended consequences in the proposed removal of securities from the HQLA definition to the broader economy. For example, many large banks have staff devoted to assisting the MLH banks access and participate thereafter in capital markets. Removing MLH ADIs from these markets, will inadvertently shrink these coverage staff requirements and associated trading.

The above paragraph highlights another important aspect in that securities are also important for MLH bank liabilities, not just their HQLA.

Over many years, regulators, ratings agencies, lead banks, lawyers, issuers and other have all worked hard to bring MLH banks to the capital markets. This was a deliberate strategy for banks to grow and diversify their liabilities and funding, thereby becoming safer. Capital markets offer variety of funding, volume and tenor that things such as Term Deposits cannot. MLH banks accessing capital markets has been a huge achievement and has worked to de-risk those banks from narrow forms of funding as outlined objectives within APG 210.

However, without a deep and broad market, MLH banks will struggle to find buyers for their paper at reasonable margins. This is not to say that MLH banks are reliant upon each other to support and buy each other's paper. MLH term issuance has of late proven reasonable volume across a range of investors, but they often are able to attract other investors in together with the MLH bank bid. Excluding MLH banks from holding these bonds for HQLA could threaten future funding.

Therefore, the draft APRA proposal will actually work counter-productively to push ADIs away from diversification of funding which the smaller sector has worked so hard to achieve over many years, towards greater concentration on retail term deposits, RMBS (for those that have this) or more pressure on internal self-securitisation (for those that have this). Overall interbank securities buying is a small portion of a bank's funding source and whilst important, does not actually carry with it much contagion risk. It would therefore be better to keep the small proportion of banks holding peer securities than to push pressure onto other funding, possibly triggering a deposit war when such things as the TFF are looking to be repaid. There is limited history and evidence of the contagion/circular run or undue pressure on the RBA for repo/emergency funding against struggling MLH banks holding bank securities.

It should be remembered that access to capital markets needs to be balanced against reasonable costs to that funding source. There has always been a higher price for non-repo eligible kangaroo securities compared to equally rated securities that are. Similarly, higher priced securities can scare some investors off and ultimately the issuing entity must absorb and pass on those higher costs or withdraw its offering from the market and risk reputational damage limiting its future re-issuance chances. More participants in a deal can draw others in and they feel safer that the bond line is more liquid as there is more credit approval and appetite for the paper.

Dylan Burke from Kapstream/Janus Henderson at the 2023 KangaNews Mutuals Conference noted that they don't invest in small issues due to liquidity and the inability to liquidate a holding in a line that is generally less than $100m. This theme is not unique as many fund and portfolio managers hesitate and resist buying into BBB rated MLH bank bonds or NCDs. APRA could survey the industry or work with Austraclear to data mine the history of varied holdings, and whilst it has improved over the years, the current proposals I feel will take the industry backwards and further limit the MLH banks.

One of the reasons why MLH banks can safely use a portion of their HQLA in securities is because they do not operate trading desks. They do not have to actively make a market in any paper (including their own) and hence do not have to account for their securities as available-for-sale. Whilst I note APRAs proposal to fair value securities and adjust the capital base accordingly (which I will expand upon below), being hold-to-maturity investments means that there is no forced liquidation if the price drops/spread widens. ADIs can repo and have documented and board approved contingency plans. Hence, they can 'sit through the noise' of market turmoil and can actually benefit themselves and the industry by taking advantage of securities that they see value in.

Keeping bank deposits:

There is a disconnect leading to a double standard of perceived risk that deposits at a bank can be counted as HQLA but the equal ranking bond with more channels for global timely liquidity from the same bank cannot be counted. Their risks are asymmetrical.

It could be well argued that breaking a term deposit or withdrawing funds from an at call account from one bank by another bank can have a greater contagion/run amongst banks than unknown repo or selling of a security in the secondary market.

As noted previously, deposits are direct between banks but securities trade without notice or impost to the issuing bank.

The other major advantage securities have over deposits is that they have an ISIN. As such they offer greater liquidity than a deposit and can be tracked, traded and re-valued anywhere. In addition, they are stored independently and safely; deposits have little records or safe custody in comparison.

In summary, I see the draft proposal by APRA inverted to the reality of the product risk and what should be done to make the frameworks and industry more resilient. Deposits at other banks should be removed from the HQLA definition and securities should be included.

Issues with the current definition and other considerations:

The proposed new HQLA definition in this letter will clarify the current misunderstanding amongst some market participants that either government owned and/or government guaranteed securities are eligible HQLA. It will also achieve this systematically as HQLA will identifiable via the ISIN from the RBA eligibility list. Banks and regulators together will be able to operate their oversight in near real-time fashion.

The proposed new HQLA definition in this letter will close the loop of inconsistency that is potentially dangerously leveraging ADIs through repo usage. Currently, there are securities that are not HQLA eligible but are repo eligible with the RBA (often also private/interbank repo providers accept the same collateral as the RBA). As such, an ADI may purchase these non HQLA securities and repo them for cash/other HQLA securities, but then run the risk if the repo is not re-offered. It is far more robust and safer to remove this middle layer which ADIs can leverage, by aligning the RBA repo eligibility list with HQLA definitions, for all banks.

HQLA Level 2 definitions won't need much change and can largely remain as foreign currency holdings.

The proposed new HQLA definition in this letter will broaden and diversify holdings and create internationally harmony as such things as covered bonds, SSA and top tier RMBS will be eligible. It will lead to better operating systems amongst banks including ideally one day, homogonous settlement systems where banks can hold HQLA and access liquidity safely and independently neutral of currencies and jurisdictions. Overall, it will create deeper pools and more options to access liquidity aiding robustness. As the securities market increases in size and number of participants, it will further bring in more funds from other industries/abroad and overall the whole Australian bond market will benefit and become more resilient.

I can see that some commentary may label the proposed new HQLA definition as another CLF. It is not a CLF in that there is not a committed line with the RBA. What is proposed is a definitional change for ADI HQLA. How an ADI manages itself in a time of stress is still its own responsibility and there is no commitment or obligation by the RBA under this proposal. The RBA or any other repo participant will make a service/price in its own accord. Banks must still have a CPS 190 recovery plan that factors access to various funding markets at various times. How banks liquify the assets at a point in time when needed will be dependent upon many factors, but at least the asset types they are holding/securities have an ISIN, trade globally in various methods, can be used in various repo and security lending in different ways and so are a better inclusion in the HQLA definition than bank deposits. ESA fees do not carry OMO or other repo commitments like paying the previous CLF fee.

The proposed new HQLA definition in this letter excludes self-securitisation.

There are added benefits to other APRA regulated institutions apart from ADIs. As there is more diversification and distribution, non-bank holders of securities such as insurance and superannuation entities will have more avenues for accessing liquidity. Currently, these entities mainly fire sell their securities in times of need.

The new HQLA definition proposed would enable APRA to reinstate the 100% LCR pass-mark for foreign ADIs per the global ratio. They could be allocated the same 70% as MLH ADIs which would be a safer and more robust outcome as they would be holding more HQLA in a more diversified base than their current 40% HQLA1 requirement currently.

The approach outlined in this paper would enable assorted securities such as covered bonds, SSA and RMBS to fully prove themselves through different times for future consideration on how the HQLA definition or percentages could be adjusted.

Moving all banks to government securities actually increases their risk as all their eggs are in one basket, rather than being diversified keeping in mind that there have been many instances of sovereign crisis. I agree that sovereign crisis will hit all sectors/industry but the spirit of diversification is to be initially less concentrated to single names/types of HQLA.

In deepening and broadening the financial market that this proposal will achieve, it affords an uplift to the Australian market that can be used for things as compiling reference rates and future risk-free rates. More participants means more transactions, which means more data and therefore better benchmarks.

The 70% rule suggested in this paper is not mandatory and individual banks are welcome to set their own appetites which may see them holding greater percentages of government securities.

Per APRAs letter Targeted changes to ADI liquidity and capital standards on Wednesday November 15th it noted:

'As part of APRA's future planned comprehensive review of liquidity requirements, APRA will also consider additional changes to ensure that both the MLH and LCR regimes remain appropriate under a range of different scenarios, including a potentially lower stock of government bonds'

The suggestions in this letter to align the HQLA definition in this paper will support this need ahead when there might be lower stock of government bonds.

From that same letter, I do slightly disagree with footnote one, in that MLH pre-dates the government bond shortage and there was a time all banks could include bank securities in their HQLA, and the system operated well.

3) Industry Congruency:

I suggest that there needs to be a minimum common standard across the banking landscape in Australia by 2029/30. By this time, all ADIs must:

- Have their own ESA
- Have their own Austraclear account
- Have access to hedging such as cleared IRS/Futures, with at least 3 counterparts
- Have access to RBA OMO and RITS
- Have access to repurchase transactions with at least 3 counterparts

What is missing I feel from a robust liquidity risk management framework is the uniform capability to do things.

The industry needs common plumbing and data and both domestically and internationally fellow participants must be assured that all ADIs in Australia are on the same playing field. This approach is the best way to make the overall banking industry in Australia more robust and able to be resilient to deal with future issues as they emerge.

The 2029/30 timeframe suggested is from APRAs drafts that bank could have 5 years to transition out of holding bank securities. Rather, I suggest using this timeframe to uplift ADIs to a uniform standard. New banking licence applications however must demonstrate in their FSSA a co-application for ESA and signed ISDA/GMRA/Clearing and settlement services.

All current banks should also provide an annual attestation of their capabilities, including any changes and number of counterparts. I have observed situations where smaller ADIs relied solely on the services from one larger ADI, only to have those services altered or severed. This attestation should also highlight the specific capabilities, for example any limits on the type, tenor of swaps or the inclusion of ‘right to breaks’.

As a stepping stone to all banks having their own ESA, MLH banks should include only their one main bank account in their HQLA.

To clarify, the suggestion that all banks having an ESA does not mean that all banks need to operate it themselves. Smaller ADIs may still use agency/custody/proxy etc services if they choose, but there is a world of difference when the account belongs to the ADI as compared to the current where an ADI has a bank account with another ADI to transfer its transactions through. Ultimately, only funds in the central bank ESA should count to HQLA.

The RBA should not fear a rush to for ESA applications, as noted the 5-year time horizon will ensure applications are orderly.

All new retail bank licence applications must have framework for internal/external securitisation established as part of their FSSA. The ADIs may choose to activate it until they reach a certain size, but at least the background work (including systems, data, reporting and GL mapping for example) is set up from the start and integrated across the ADI. Waiting for the balance sheet to grow and then starting the project in my mind is the wrong process.

Currently, the fragmented market means that there are ADIs that are affecting the overall strength and resilience of the industry. Together with removing deposits and ensuring all HQLA has an ISIN, uniform capabilities will make the industry more robust.

Embedded in these suggestions is that all banks must have access to RITS and ultimately, creates a robust landscape across the industry for universal adoption of the New Payment Platform which will help reduce scams amongst other things and other advancements such as electronic conveyancing.

Within APG 210, for example paragraphs 52-62, there are many objectives that are achieved by the suggestions within this proposal. Further, the APG seeks to address situations such as if for example capital markets experience disruption, but we must also consider what if deposits at banks suffer distress after a cyber-attack limits retail systems, but wholesale/capital markets are still open.

Once all participants are on the common infrastructure, work will naturally evolve on cross border systems harmony and congruency.

The HQLA definitional change proposed in this letter works together with the requirement for all banks to be on the same infrastructure. Keeping bank deposits as HQLA has held some ADIs back from advancing their capabilities.

Another consideration is that there has become a concentration of outsourcing and infrastructure. Previously, there were many local and foreign banks as well as non-banks offering smaller banks custody/hedging/agency services etc. Over the years, such services have closed and not all banks have full offerings available. Ensuring there is commonality amongst ADIs as proposed alleviates this.

With all banks holding ISIN based HQLA on the same infrastructure, things such as OMO or emergency requests can be digitised. The IBOC can be digitised and overall will actually be easier for regulators to manage if an ADI encountered. Ideally, Austraclear which houses HQLA should move to RBA ownership behind RITS as it becomes systematically important infrastructure which should be shielded from corporate ownership/servers etc.

The industry will be far more resilient and robust by having all banks on the same infrastructure than by the proposed removal of securities as HQLA. More so though, retaining securities as HQLA enable APRA and APRA Connect to cross check ISINs in near real-time to ensure all ADIs have correct qualifying HQLA holdings and fair values against capital can similarly be cross checked. This will make APRA a global leader in independently being able to pick up anomalies very early on.

Global investors will be more comfortable in investing into Australia and smaller ADIs, knowing there is a uniform standard across the industry in both HQLA definitions and infrastructure. Australia overall needs this due to the amount of imported capital and it will further enable new products to be developed and expanded such as corporate CP.

It is not the balance sheet size that makes an ADI robust and resilient, it is its capabilities.

<u>Market risk/mark to markets/fair value:</u>

Overall, I support APRAs recommendation to introduce the requirement for fair value of HQLA for all banks. Further, I applaud APRA for updating APS117 to note that all banks have some IRRBB and that all banks should have some basic understanding and monitoring of this at the least. Interest rate risk should be in every bank RAS, commensurate to their size and complexity.

One of the issues though that I suggest APRA to clarify, especially to help the smaller/MLH banks is the mechanics of fair valuing. As noted previously, it is my experience that not all ADIs have adequate systems, with timely information feeds to provide prices and run their mark to markets.

The concept of fair value can be universally understood but the implementation will be different across all banks. Such things as the source and frequency alone will cause differences in how the process is done at each bank. Drilling deeper, ADIs will apply different thins such as mid/bid/ask prices, should they use clean or dirty prices, some may use live feeds from Reuters/LSEG (hereafter interchangeable)/Bloomberg whilst others may use closing or yesterday prices from Yieldbroker pdf reports which will require manual updating into spreadsheets. Some securities do not have updated prices and may rely on Bvals. As such parameters or guardrails should be set in the guidance notes.

Ultimately, pricing occurs only where a buyer and seller meet; the more participants trading in the system as outlined in this letter will naturally help this rather than removing many participants.

The underlying spirit as to why APRA should help clarify fair valuing protocols is to avoid the situation where two banks could come up with different valuations for their holding of the same security.

It must be remembered that many ADIs do not have inhouse systems such as Bloomberg or Reuters and even when they have a 'treasury system' it may or may not include a data feed (and whether that feed is live or delayed). As such I feel many ADI will have reliance on random possible sources for market prices that will largely be delayed (inaccurate). This delay is not just related to updating bond

prices, it has flow on effects on when the MLH ratio itself can be updated. APRA should use this opportunity to work with APS 111/APG 210 paragraph 77 for fair valuing and how and when the MLH ratio need to be calculated and circulated.

As noted previously, having HQLA only as ESA and ISIN based securities means that ahead with APRA Connect, end of day cross checks could be done by APRA incorporating both their own independent market based fair value, the composition of HQLA (and checking subsequent limits such as large exposures) and against the total on and off-balance sheet to derive the MLH ratio.

The majority of government securities are fixed and long term, with many small ADIs not having adequate hedging facilities in place. As such assuming this draft was in force over the previous few years, the mark to markets would have devasted banks in such a position. It is actually well demonstrated with the RBA losses on their holdings. For those that had hedges, a balanced approach against their fair values needs to be considered, otherwise there is asymmetry between the asset and its hedge effectiveness.

Mark to markets on HQLA has been previously discussed by APRA. In particular it had been noted to me where a bank doesn't have the systems to price their holdings, the included amount should be face value less the relevant RBA haircut. Perhaps a similar approach could be used until all ADI demonstrate their fair value systems.

Similar to the calculation of MLH, sweeping fair value losses to capital needs to be clarified. For example, what frequency is the sweep to occur? Whilst fair values should be as timely as possible, frequent gyrations of the capital base should be avoided. More so, per the earlier issues noted about where revaluation prices are sourced and based off, a buffer or tolerance needs to be set so that gyrations shown in the below screenshots to not impact the capital base, which in turn can disrupt other limits which are based off the amount of capital.

Much of the approach to fair valuing securities is tied to previous notes in this letter about having adequate dashboards, systems and segregations. In short, a holistic approach to the risk management framework is encompassed, and for example ADIs should ensure that all securities, including those held for investment rather than HQLA are similarly re-valued. Else, losses accruing in one portfolio could disrupt other healthy portfolios. This is further important as historically the business/accounting model has been to hold to maturity, not trade securities. Fair valuing needs to be incorporated without introducing a trading behaviour and tolerances and protocols for mark to market losses needs to be outlined between the ADI, its board and APRA before the APS comes into force.

ADIs should similarly be reminded that an observable price does not mean that the liquidity provider will price them there or even be able trade with them.

Related to the fair values and APS 117, APRA should consider the concept that there are risk free or zero percent risk weighted assets. I personally do not believe there is anything zero percent and have witnessed many governments default and eradicate their outstanding bonds. As such a small RWA should apply to even Commonwealth Government debt as a prudent approach.

Whilst the LCR is a global framework, there has always been scope for local variation. The suggestions in this letter are not to vary the model but a very modest change to HQLA 1 to allow a small proportion of non 0% risk weighted assets, as noted no asset is ever truly 0%. The inclusions will actually strengthen and diversify the HQLA per the APS/APG objectives, the overall market will function better and reduce overall risk.

Workshops:

I applaud APRA for its consultative approach in these draft proposals and to facilitate workshops and industry round tables as required. Such an approach would have been helpful previously about capital notes rather than the letter that was issued and I would add that it would have also have been helpful prior to releasing an actual draft/marked up APS 210 in this instance, as I observed at both times market dislocation.

Nevertheless, in the spirit of the workshops, I suggest the following workshops to help guide the standards ahead.

- A workshop with Accounting bodies and firms. This will help clarify the fair value processes and align banking prudential requirements with accounting statutory reports for example to generate harmony. Over the years and the various IFRS /AASB changes, many smaller ADI are confused about their HTM and AFS obligations and limitations. Fair value, amortised costs, hedge effectiveness, reserves etc all needs whiteboarding.
- A workshop with market data providers, e.g. Reuters/Bloomberg/ASX/Yieldbroker. This will aid to understand the accessibility and underlying sources of fair value prices that ADIs might be able to access. This should then be cross referenced against the ADI organisation structure to ensure that the systems and process maps offer robust segregations between offices and contingencies for the future. For example, the whole exercise is defeated if a front office staff member downloads prices into a spreadsheet and then distributes a fair value report. These participants can also discuss developments and future options to further deepen the market such as for non-prime NCDs.
- A workshop with banking/treasury system providers. APRA needs to fully understand the systems that ADI use and their market feed inputs and dashboard/reporting outputs. For example, there is a system that provides security re-pricing, but only if that ADI has Reuters codes, not if the bank has Bloomberg. Further, a discussion should be had as to how for example the system re-values short dated securities such as NCDs and whether it can separate a market and credit risk component of the value. Further, this discussion could help guide ADIs that previously have not monitored IRRBB on various options.
- A workshop with joint lead managers in securities and assorted asset managers. This could be facilitated by someone like KangaNews to fully understand the appetite and landscape ahead for BBB or non-rated issuers. This workshop could also include sales and trading participants to understand the secondary trading nature of bonds.
- A workshop with the RBA and ASX-Austraclear/Euroclear/Clearstream. This workshop is pertinent especially for back office and operations staff and should include providers such as Cuscal and Indue. As noted, universal systems and access to them is important to uplift the industry ahead and the RBA can take the opportunity to explain their process for ESA application and the various ESA options available. The RBA can also consider any requirements to vary the OMO such as reducing the minimum entry size or working on a future AUD SOFR using assorted collateral on wider haircuts. Further, these participants can discuss hedging solutions for ADIs.
- A workshop with the various rating agencies. Currently, bank ratings incorporate an element of access to varied and diversified funding with tenor. This is achieved through their bond issuance programmes. Inhibiting an ADIs bond issuance may have repercussions for their ratings which need to be discussed. Further it could be a great opportunity to discuss the use of external credit ratings. Most small ADI cannot do their own thorough due diligence on a large number of counterparts and cannot look through an external rating and any implied

government support. It is why in essence credit ratings exist and why small ADI often use them, though their use is not limited to the small, for example the RBA itself uses credit ratings for such things as repo-eligibility.

- A workshop with the AOFM/State government funding agencies and others. As noted, there is very little, shorter dated and floating rate securities that ADI can purchase to satisfy their HQLA needs. APRA should host a discussion to see if there are options for more issuance ahead or what seems to be the likely scenario that this amount as well as the overall government stock amount will or could reduce ahead. The discussion can also be broadened to subjects such as strengthening securitisation for issuers and buyers and improving how APS 120 functions.
- A workshop with ASIC and COBA et al. APRA should work with the other government departments and business councils to discuss options for smaller ADI to de-mutualise or source alternative external capital.

Takeaway thoughts:

Much of the background to this letter is derived from the thinking of Nassim Taleb, author of The Black Swan and his subsequent book Antifragile, where he notes that safe and resilient systems/markets are often those with less rules/restrictions and requirements. As such the approach outlined in this letter seeks to simplify and broaden the HQLA definition.

Overall, this liquidity/APS review should be to broaden the range of investments i.e. more eggs across more markets. It is the irony that during all crisis, the only market to be truly open, operating and efficient with prices and trades is the equity market. This is because it proved its liquidity because it has such a large range and number of participants, not the security type.

MLH banks have worked hard, often as instructed, to lengthen and broaden their funding away from purely retail deposits. Together, the Australian bond market has grown considerably over the years and this discussion should seek to further support both of those advancements. Pushing banks towards a deposit war as their only source of funding may lead to home lending rate increases out of cycle, lessening overall competition.

It was noted by APRA that the draft APS 210 proposal may generate lower returns for MLH banks. This should be expanded upon. Firstly, it could be proposed to lower the MLH ratio to offset the lower returns because also the quality of the HQLA has improved.

I do not support this. MLH ratios should not be lowered as it reduces the amount of the liquidity by being confused that the quality has increased, the two are separate. Further an MLH ADI may increase bank deposits instead as HQLA which actually adds to the risks. My suggestion is rather to increase the MLH ratio to a uniform 10% with broader holdings that now include 30% govt based paper per my suggested HQLA definition. This is a safer and more workable solution than currently where MLH banks are not required to hold government-based securities. Historically the BIS has noted that liquidity ratios should not be below 8% and this liquidity review should work towards internationally accepted perspectives, even to lead them in some cases, balanced against the unique operating idiosyncrasies of each jurisdiction.

Secondly, retained profits act as a source of capital generation for ADIs, especially the smaller ADIs where they generally have less options than other banks. Therefore, returns are important to many smaller ADIs even though they are not profit orientated. Further, many of these smaller banks are about community banking; operating profitably is not about paying back to shareholders, but giving in the regions and communities in which the smaller ADIs operate in.

The suggestions in this paper fit the adage that more participants spreading the risk than less participants and more concentration into single products/channels. This is not contagion/risk spreading but dissipating the risk.

Exceptional Liquidity Assistance will be strengthened through all banks having an ESA and all holdings having an ISIN. Similarly, ESA will help with uniform ARS117.0 and other reporting.

The proposal to include RBA eligible securities does not introduce additional credit risk for HQLA because:

1) as noted even governments have credit risk
2) the essence of the RBA OCR is interbank lending which includes credit risk as does including deposits as HQLA
3) individual counterpart and large exposure limits control it
4) risks are spread across many names and industry type etc. actually make it safer than concentrating into a few/one government

In summary, this letter has sought to outline:

1) There needs to be a minimum capability across the industry underpinned by a common uniform level to be a licenced ADI in Australia,
2) The LCR and MLH methodologies are fit for purposes between the two groups of ADIs and don't need to be changed,
3) A common definition of HQLA across all ADIs, premised that Cash/Exchange Settlement funds, all other HQLA must have an ISIN and be acceptable to the RBA is more workable and safer than what has been proposed in the draft APS,
4) The above HQLA definition is further controlled by the 70% rule
5) More participants and transaction in a market leads that market to function better through adverse times

Overall, this letter has demonstrated a balanced approach for the practicality and commerciality for the industry together with the safety and resilience required in a prudential framework.

Thanks and regards,

Anthony Issa.

Bank Treasurer
Sydney NSW 2000
Ph:
E:

Example of fair value gyrations:

SOCGEN Float 03/03/27 ↑97.556 -1.282 97.443 / 97.669 187.360 / 179.527
At 13:45 -- x -- Source BGN
See What's New in ALLQ

SOCGEN F 03/03/2027 REGS Corp | Request Access | Settings | All Quotes

13:45:59 ALLX Overlay Axe Size Split Bid/Offer
Spreads vs <Add Security>
Edit Filters

PCS	Firm Name	Bid Px / Ask Px	Bid DM / Ask DM	BSz(M) x ASz(M)	Time
CBBT	FIT COMPOSITE	98.712 / 98.939	187.36 / 179.53	x	13:45
QMGR	Last QMGR Quote	98.850 /	139.000 /	2,000 x	11/29
BVAL	BVAL (Score: 9)	98.860 / 99.070	138.62 / 131.47	x	08:00
NABX	NAT'L AUSTRALIA BA...	98.6730 / 98.8190	145.00 / 140.00	3,000 x	13:44
WBCA	WESTPAC BANKING C...	98.498 / 98.790	150.98 / 141.00	3,000 x	13:41
BRJY	BARRENJOEY	98.734 / 99.027	142.91 / 132.93	2,000 x 50	13:45
CBAA	Commonwealth Bk A...	98.849 / 98.995	139.00 / 134.00	2,000 x	13:42
TDAC	TD SECURITIES	98.701 / 98.847	142.00 / 137.00	500 x	13:42
SNCB	SMBC NIKKO CM LTD	98.351 / 98.642	156.03 / 146.06	1,000 x	10:29
BGN	BLOOMBERG GENERIC ...	97.443 / 97.669	187.36 / 179.53	x	13:45
EBNP	BNP PARIBAS eTRADI...	98.817 / 99.111	139.91 / 129.92	x	11/29

Suggested Functions | GY See if yields are historically high/low | GC Monitor real-time & historical curves

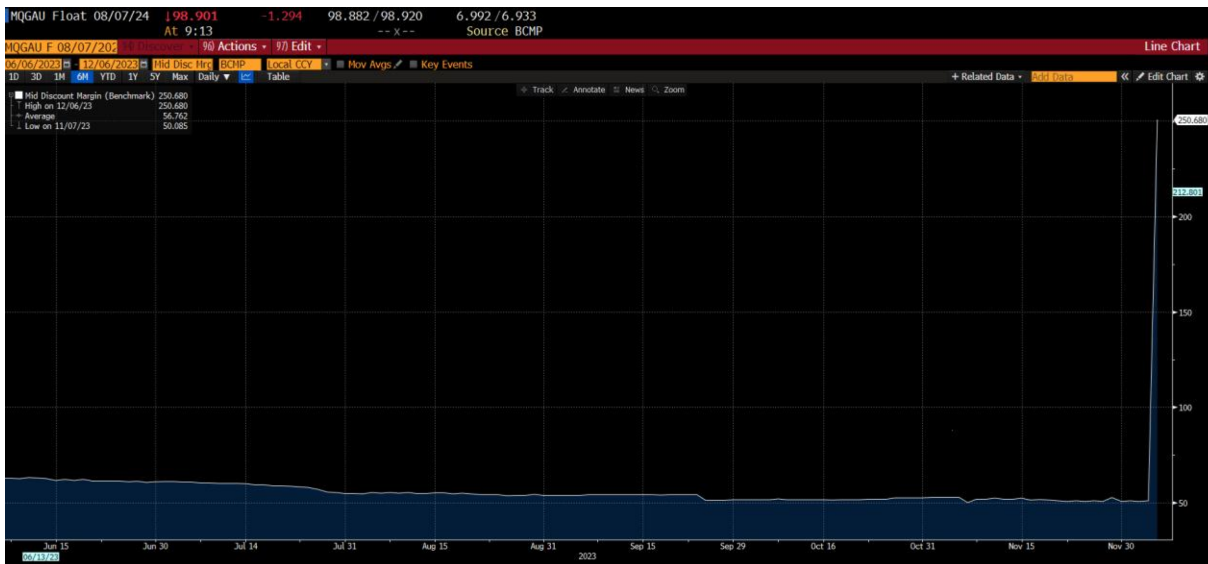
SOCGEN Float 03/03/27 97.556 -1.282 97.443 / 97.669 187.358 / 179.529
At 13:47 -- x -- Source BGN
BU770454 Corp
Actions
Edit
Line Chart
11/30/2022 - 11/30/2023 Last Px BGN Local CCY Mov Avgs Key Events
1D 3D 1M 6M YTD 1Y 5Y Max Daily Table
Related Data Add Data Edit Chart
Track Annotate News Zoom
Last Price 97.556
High on 11/23/23 100.113
Average 98.311
Low on 11/30/22 97.426
100.000
99.500
99.000
98.500
98.000
97.556
97.500
Dec 15 2022
Dec 30
Jan 16
Jan 31
Feb 28
Mar 15
Mar 31
Apr 14
Apr 28
May 15
May 31
Jun 15
Jun 30 2023
Jul 14
Jul 31
Aug 15
Aug 31
Sep 15
Sep 29
Oct 16
Oct 31
Nov 15
Nov 30
Suggested Functions
QMGR Monitor OTC quotes for an FI security
HZ1 Horizon Analysis
1:47 PM
30/11/2023

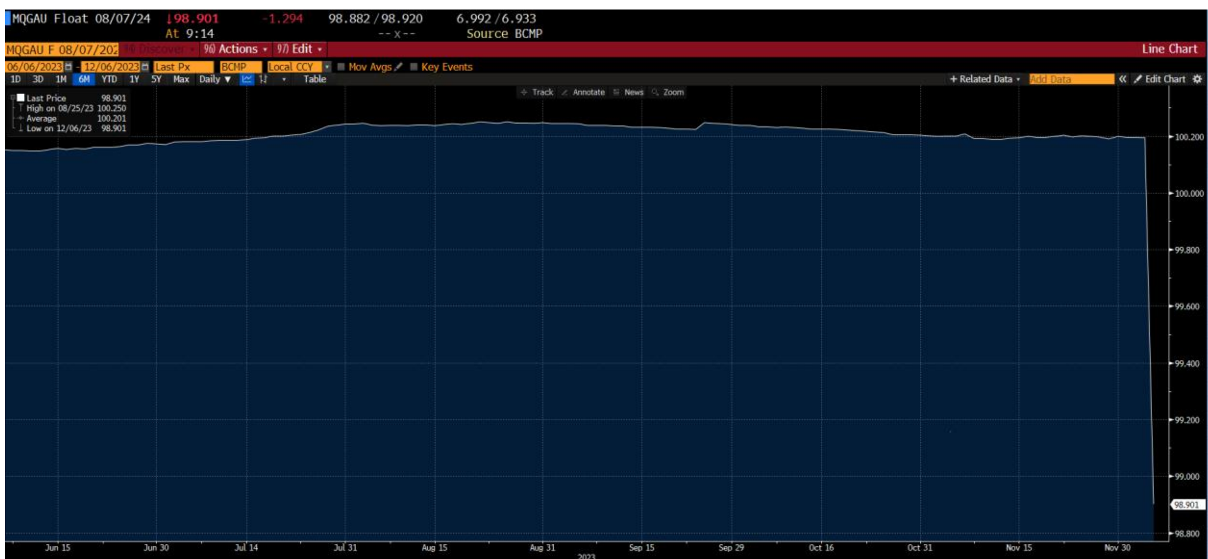
SOCGEN Float 03/03/27 98.838 -.002 98.730 / 98.946 143.151 / 135.753
At 14:09 -- x -- Source BGN
BU770454 Corp
Actions
Edit
Line Chart
12/05/2022 - 12/05/2023 Mid Disc Mrg BGN Local CCY Mov Avgs Key Events
1D 3D 1M 6M YTD 1Y 5Y Max Daily Table
Related Data Add Data Edit Chart
Track Annotate News Zoom
Mid Discount Margin (Benchmark) 139.440
High on 11/30/23 183.433
Average 148.982
Low on 11/23/23 96.080
180
160
139.440
120
100
Dec 15 2022
Dec 30
Jan 16
Jan 31
Feb 28
Mar 15
Mar 31
Apr 14
Apr 28
May 15
May 31
Jun 15
Jun 30 2023
Jul 14
Jul 31
Aug 15
Aug 31
Sep 15
Sep 29
Oct 16
Oct 31
Nov 15
Nov 30

SOCGEN Float 03/03/27 98.838 -.002 98.730 / 98.946 143.151 / 135.753
At 14:10 -- x -- Source BGN
BU770454 Corp
Actions
Edit
Line Chart
12/05/2022 - 12/05/2023 Last Px BGN Local CCY Mov Avgs Key Events
1D 3D 1M 6M YTD 1Y 5Y Max Daily Table
Related Data Add Data Edit Chart
Track Annotate News Zoom
Last Price 98.838
High on 11/23/23 100.113
Average 98.328
Low on 12/07/22 97.453
100.000
99.500
99.000
98.838
98.500
98.000
97.500
Dec 15 2022
Dec 30
Jan 16
Jan 31
Feb 28
Mar 15
Mar 31
Apr 14
Apr 28
May 15
May 31
Jun 15
Jun 30 2023
Jul 14
Jul 31
Aug 15
Aug 31
Sep 15
Sep 29
Oct 16
Oct 31
Nov 15
Nov 30

SUNAU Float 07/12/28 98.688 -1.274 98.598 / 98.777 5.503 / 5.459
At 8:43 --x-- Source BCMP
SUNAU F 07/12/202
96) Actions
97) Edit
Line Chart
06/06/2023 - 12/06/2023 Mid Disc Mrg BCMP Local CCY Mov Avgs Key Events
1D 3D 1M 6M YTD 1Y 5Y Max Daily Table
Related Data
Edit Chart
Track Annotate News Zoom
Mid Discount Margin (Benchmark) 137.003
High on 12/06/23 137.003
Average 102.545
Low on 10/05/23 99.661
137.003
140
135
130
125
120
115
110
105
100
Jul 7 Jul 14 Jul 21 Jul 31 Aug 8 Aug 15 Aug 23 Aug 31 Sep 8 Sep 15 Sep 22 Sep 29 Oct 9 Oct 16 Oct 23 Oct 31 Nov 8 Nov 15 Nov 22 Nov 30
2023

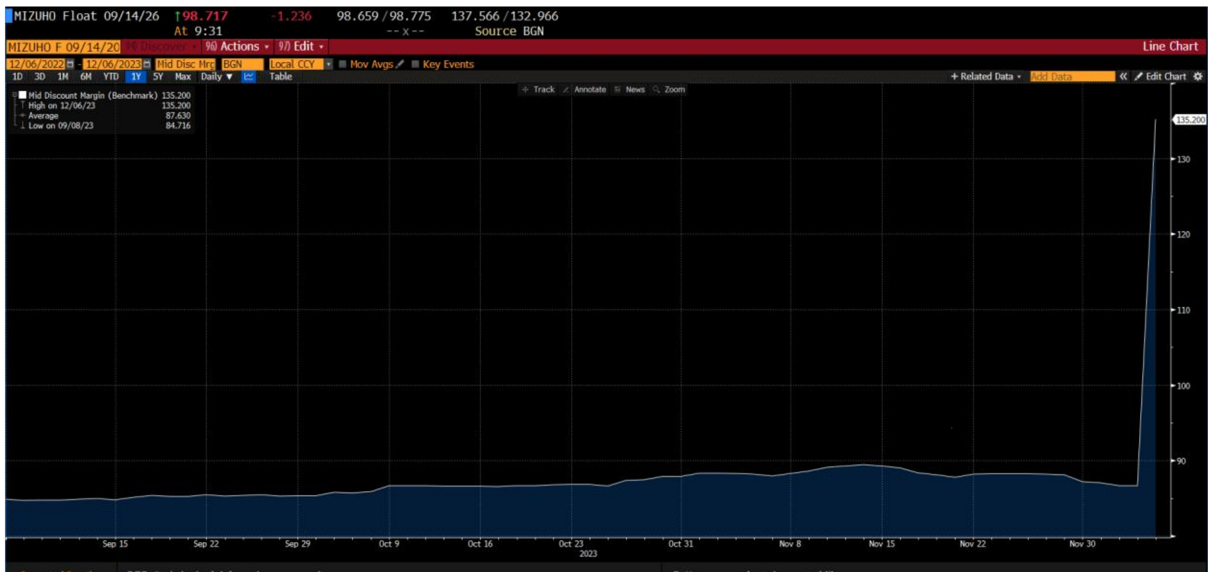
SUNAU Float 07/12/28 98.688 -1.274 98.598 / 98.777 5.503 / 5.459
At 8:44 --x-- Source BCMP
SUNAU F 07/12/202
96) Actions
97) Edit
Line Chart
06/06/2023 - 12/06/2023 Last Px BCMP Local CCY Mov Avgs Key Events
1D 3D 1M 6M YTD 1Y 5Y Max Daily Table
Related Data
Edit Chart
Track Annotate News Zoom
Last Price 98.688
High on 08/02/23 100.256
Average 100.105
Low on 12/06/23 98.688
100.200
100.000
99.800
99.600
99.400
99.200
99.000
98.800
98.688
98.600
Jul 7 Jul 14 Jul 21 Jul 31 Aug 8 Aug 15 Aug 23 Aug 31 Sep 8 Sep 15 Sep 22 Sep 29 Oct 9 Oct 16 Oct 23 Oct 31 Nov 8 Nov 15 Nov 22 Nov 30
2023


MQGAU Float 08/07/24 98.901 -1.294 98.882 / 98.920 6.992 / 6.933
At 9:13 --x-- Source BCMP
Line Chart
Actions
Edit
Mov Avgs
Key Events
Related Data
Edit Chart
Track
Annotate
News
Zoom
Mid Discount Margin (Benchmark) 250.680
High on 12/06/23 250.680
Average 56.762
Low on 11/07/23 50.085
250.680
200
150
100
50
Jun 15
Jun 30
Jul 14
Jul 31
Aug 15
Aug 31
Sep 15
Sep 29
Oct 16
Oct 31
Nov 15
Nov 30
2023


MQGAU Float 08/07/24 98.901 -1.294 98.882 / 98.920 6.992 / 6.933
At 9:14 --x-- Source BCMP
Line Chart
Actions
Edit
Mov Avgs
Key Events
Related Data
Edit Chart
Track
Annotate
News
Zoom
Last Price 98.901
High on 08/25/23 100.250
Average 100.201
Low on 12/06/23 98.901
100.200
100.000
99.800
99.600
99.400
99.200
99.000
98.901
98.800
Jun 15
Jun 30
Jul 14
Jul 31
Aug 15
Aug 31
Sep 15
Sep 29
Oct 16
Oct 31
Nov 15
Nov 30
2023

SUMIBK Float 07/28/26 98.818 -1.336 98.726 / 98.909 102.565 / 95.080
At 9:17 --x-- Source BGN
Line Chart
Actions
Edit
Mov Avgs
Key Events
Related Data
Edit Chart
Track
Annotate
News
Zoom
Mid Discount Margin (Benchmark) 153.536
High on 12/06/23 153.536
Average 99.724
Low on 02/13/23 88.285
150
140
130
120
110
100
90
Feb 13
Jun 15
Jun 30
Jul 14
Jul 31
Aug 15
Aug 31
Sep 15
Sep 29
Oct 16
Oct 31
Nov 15
Nov 30
2023

SUMIBK Float 07/28/26 ↑98.818 -1.336 98.726 / 98.909 102.565 / 95.080
At 9:17 -- x -- Source BGN
SUMIBK F 07/28/20
96) Actions
97) Edit
Line Chart
12/06/2022 - 12/06/2023 Last Px BGN Local CCY
Mov Avgs
Key Events
1D 3D 1M 6M YTD 1Y 5Y Max Daily Table
Related Data
Add Data
Edit Chart
Track Annotate News Zoom
Last Price 98.818
High on 02/10/23 100.520
Average 100.142
Low on 12/06/23 98.818
100.500
100.000
99.500
99.000
98.818
Feb 13
Jun 15
Jun 30
Jul 14
Jul 31
Aug 15
Aug 31
Sep 15
Sep 29
Oct 16
Oct 31
Nov 15
Nov 30
2023


MIZUHO Float 09/14/26 ↑98.717 -1.236 98.659 / 98.775 137.566 / 132.966
At 9:31 -- x -- Source BGN
MIZUHO F 09/14/20
96) Actions
97) Edit
Line Chart
12/06/2022 - 12/06/2023 Mid Disc Mrg BGN Local CCY
Mov Avgs
Key Events
1D 3D 1M 6M YTD 1Y 5Y Max Daily Table
Related Data
Add Data
Edit Chart
Track Annotate News Zoom
Mid Discount Margin (Benchmark) 135.200
High on 12/06/23 135.200
Average 87.630
Low on 09/08/23 84.716
135.200
130
120
110
100
90
Sep 15
Sep 22
Sep 29
Oct 9
Oct 16
Oct 23
Oct 31
Nov 8
Nov 15
Nov 22
Nov 30
2023

MIZUHO Float 09/14/26 ↑98.717 -1.236 98.659 / 98.775 137.566 / 132.966
At 9:31 -- x -- Source BGN
MIZUHO F 09/14/20
96) Actions
97) Edit
Line Chart
12/06/2022 - 12/06/2023 Last Px BGN Local CCY
Mov Avgs
Key Events
1D 3D 1M 6M YTD 1Y 5Y Max Daily Table
Related Data
Add Data
Edit Chart
Track Annotate News Zoom
Last Price 98.717
High on 09/12/23 100.005
Average 99.925
Low on 12/06/23 98.717
100.000
99.800
99.600
99.400
99.200
99.000
98.800
98.717
Sep 15
Sep 22
Sep 29
Oct 9
Oct 16
Oct 23
Oct 31
Nov 8
Nov 15
Nov 22
Nov 30
2023