# Post-implementation review of the Basel III liquidity ratios in Australia:

#### A submission to the APRA review

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While the review discussion paper poses a number of specific questions, this submission adopts a more general approach to highlight issues which should also be taken into account in assessing liquidity regulation. It may be that these will be considered in the planned 2023 review, but I would argue that they are fundamental to assessing the impacts which the LCR/NSFR requirements have had, and will have in the future, on the Australian financial system. One difficulty is that there is little public data generally available to enable independent assessment of likely effects (even though APRA may have collected such data via bank reporting requirements).

#### The use of the CLF limits lessons which can be learnt from experience to date

- 1. The value of lessons to date from the effects of the introduction of the Basel III liquidity ratios in Australia will be limited by the concurrent use of the committed liquidity facility (CLF) which is being phased out by end 2022. After the introduction of the Liquidity Coverage Ratio (LCR) in 2015, use of the CLF accounted for just over 60 per cent of LCR requirements. The rationale for introducing the CLF was the shortage of government debt available for banks to hold as level 1 assets, and the decision by APRA not to allow other assets to be included in HQLA as level 2A or 2B assets, for meeting the LCR. The increased stock of government debt on issue has reduced the need for the CLF.
- 2. There were several effects arising from the availability of the CLF. One was the development of "self-securitisations" of residential mortgage loans. The resulting securities, held on-balance

sheet by the banks involved, counted towards assets eligible to be used to meet CLF access requirements. It is worth noting that the inclusion of self-securitisations appears to be at variance with the conditions required by the Basel Committee for either covered bonds or RMBS to count as level 2A or level 2B assets respectively. As stated in <a href="BCBS238">BCBS238</a> (para 54 (a)), eligible RMBS should be "not issued by, and the underlying assets have not been originated by the bank itself or any of its affiliated entities". This suggests that, in offsetting the APRA preclusion of level 2A or 2B assets to meet the LCR, the CLF may have provided a more liberal liquidity regulation framework than applying in many overseas jurisdictions where self-securitisations were not permitted to count in level 2A or 2B HQLA. (Of course, "haircuts" applied to the various asset classes, and CLF facility charges, would also need to be taken into account in assessing that conjecture, and whether removal of the CLF will make Australia's regime less liberal).

- 3. Arguably, the ability of banks to self-securitise may have limited the recovery of the RMBS market after its collapse following the Global Financial Crisis. In the absence of CLF eligibility there does not appear to be a compelling reason for banks to undertake self-securitisations. Had the CLF conditions not permitted self-securitisations, demand by banks for RMBS originated by other banks (which were eligible for the CLF) may have stimulated the RMBS market.
- 4. The introduction of the CLF partly shielded the government bond markets from the increased bank demand and resulting downward pressure on yields which would have otherwise occurred. Its removal, by increasing bank demand should provide some offset to the interest rate effects of increased supply due to ongoing budget deficits.

#### The merits of APRA's limit on the range of eligible HQLA assets can be questioned

5. More generally, the development of the CLF (and the terms involved) calls into question the decision by APRA to only allow government debt to count towards HQLA for meeting the LCR. Effectively, the CLF endows RMBS and other CLF-eligible assets with a liquidity characteristic (repo-eligibility at the RBA) not available for many other assets. But whether the CLF was necessary for that liquidity property to exist is open to question given earlier RBA decisions to expand repo eligibility for its market operations.

<sup>&</sup>lt;sup>1</sup> Paragraph 52 (b) imposes a similar restriction on eligibility of covered bonds.

<sup>&</sup>lt;sup>2</sup> Although the broadening of repo eligibility by the RBA to include non government paper as collateral after the GFC had already had that effect.

- 6. The APRA preclusion of RMBS as level 2 HQLA involves a confusion between individual bank liquidity management concerns and system-wide liquidity crisis concerns.
- 7. To explain this argument consider first a situation in which an individual bank has a liquidity problem. It will be forced to take actions which could include selling its holdings of RMBS (originated by other banks), or other assets, into the market. Potential purchasers of those assets will not push down the prices they are willing to pay because of concerns about the credit risk of the assets involved. (If other banks are aware of the seller's liquidity needs they may try to depress the price paid, but competition among potential purchasers should limit that). So, in a situation of an individual bank liquidity crisis, holdings of RMBS or other marketable assets will be able to be used to generate liquidity - and are thus suitable for inclusion in the LCR. Now consider a situation in which a generalised liquidity crisis occurs and banks respond by selling their holdings of government securities or other marketable assets. Such widespread action will push the prices of those securities down and their yields up, which is unlikely to be a desirable outcome in such a situation from the perspective of the RBA. Consequently, there is likely to be RBA operations in the cash market to inject liquidity by purchasing government debt or by repurchase agreements based on those or other eligible securities - such as RMBS. Consequently, the merits of an approach which assumes that the market can ensure enough liquidity in a crisis situation seems contradictory to the likely outcome, when the only ultimate provider of liquidity - the Central Bank – is likely to have to act. To the extent that this is the case, the exclusion of repo-eligible securities other than government debt from the LCR calculation can be questioned.
- 8. To the extent that the LCR is aimed at ensuring individual bank liquidity adequacy in a time of individual stress, there are also some questions which should be posed. First, are requirements based on a system-wide stress scenario appropriate? Second, the exclusion of a range of private sector assets from the calculation seems less warranted since their values would be little impacted by sales by one bank only. The dilemma here is that the LCR appears to be one instrument aimed at achieving two objectives one being individual bank liquidity adequacy in a single-name stress situation and the other being system wide liquidity adequacy in a generalized crisis scenario. A long standing tenet of policy formulation is that at least as many instruments are required as there are objectives if those objectives are to be fully met, rather than being constrained by a trade-off.

The LCR and NSFR have led to innovations in bank deposit products – although public information on the extent of their use is not readily available (and should be!)

- 9. The LCR involves a 30 day horizon in its calculation. Deposits/funding with a minimum possible maturity of greater than 30 days count as fully stable funding (ie have a zero run-off rate) in meeting the LCR calculation, and thus do not require any holdings of HQLA.<sup>3</sup> In contrast, most shorter term funding is assigned some non-zero run-off rate and thus involves some level of HQLA holdings. To the extent that HQLA assets offer lower returns than other assets (after adjusting for relevant perceived risks) banks will have incentives to develop innovative funding products which involve lower HQLA requirements.
- 10. In Australia, it had been traditional for customers to be able to "break" term deposits (ie request early withdrawal) with the only penalty allowed to be charged by banks being non-payment of the full interest which had accrued over the period. Because there was no penalty in terms of principal amount involved, this may be insufficient to prevent customers demanding early repayment of term deposits in a period of crisis. Consequently, there was a need for a change in legislation to allow imposition of notice of withdrawal conditions (eg 31 days) on term deposits while still allowing those deposits to be treated as "basic deposit products" (for which there are no PDS (product disclosure statement) requirements nor special staff training required). ASIC provided relief from the existing legislative requirement in December 2014 (extended in 2016) and many banks have introduced 31 day notice of withdrawal requirements for early withdrawal of term deposits. This enabled those term deposits to be assigned a zero run-off rate and avoid needing to hold additional HQLA. It is to be expected that introduction of such a constraint on early withdrawal would have led to an increase in the interest rates on term deposits demanded by those bank customers aware of the change. And banks could be expected to offer higher rates on term deposits with such a constraint relative to those on deposits without such a constraint due to avoidance of the HQLA requirement associated with the former. This is evident in the rates advertised by ANZ which offers both "Advance Notice Term Deposits" and "Term Deposits" where the latter do not require advance notice for early withdrawal but impose an interest penalty in that case. As at 5 April 2022 the interest rates advertised for 6-7 month maturity

<sup>&</sup>lt;sup>3</sup> Money is, of course, fungible such that there is no specific link between the source of funding and its use in bank balance sheets (except where there is some form of collateralisation). However, for expositional conveniences it is simplest to refer to the asset portfolio consequences of particular types of funding as involving restricted use of that funding.

deposits were 15 basis points for advance notice term deposits compared to 10 basis points for term deposits. (At December 2018, when interest rates were higher, ANZ bank was offering 2.30% p.a. on 1-2 year term deposits with a notice of withdrawal condition but only 1.40% for those without such a condition. The interest penalty for early withdrawal was calculated in the same manner for both.)<sup>4</sup>

- 11. Greater use of "notice of withdrawal" deposits is another consequence, whereby the deposit has no specified maturity but can be withdrawn with 31 (or more) days notice. (APRA has not, to date, provided bank deposit data disaggregated by type to assess the extent of use of this deposit product). A deposit which requires 31 days notice before withdrawal has a zero assumed run-off rate, and thus does not trigger a required liquid asset holding. (Of course, once notice has been given it then falls into the less than 30 day maturity category). The benefit for the bank, compared to a fixed term deposit is that a fixed term deposit will automatically roll into the less than 30 day category with the passage of time. For the investor, funds can be added to the deposit account at any time, with the interest rate paid being determined daily by the bank. Westpac for example offers a "Notice Saver" account requiring an initial deposit of \$500,000 for wholesale customers.
- 12. A further innovation although one about which there is no generally available public information regarding use was the introduction (or proposed introduction) of "notice of conversion" (wholesale) deposits. These require the customer to give at least 31 days notice of a desire to access their funds but, rather than receiving cash, the customer would receive a negotiable certificate of deposit (CD) of specified maturity such as six months which could then be sold into the market place for cash. While the customer thus obtain cashs when the period of notice is complete, the bank does not suffer a cash outflow until the maturity date of the CD. The notice period means that there is no HQLA requirement arising from the deposit (nor is there any HQLA requirement after the notice period until the CD has less than 31 days left to maturity). By specifying the maturity of the CD to be received to be, say, six months there were advantages for the bank in meeting the NSFR requirement, since the deposit would count partially as available stable funding (ASF), or 100 per cent ASF if the CD maturity was 12 months.

<sup>&</sup>lt;sup>4</sup> <a href="https://www.anz.com.au/personal/bank-accounts/your-account/rates-fees-terms/#advance">https://www.anz.com.au/personal/bank-accounts/your-account/rates-fees-terms/#advance</a> (viewed 4 January 2019). In January 2020, "advance notice term deposits" paid a premium of 60 bp for three month maturity, declining to 25 bp for 12 month maturity (<a href="https://www.anz.com.au/personal/bank-accounts/term-deposits/">https://www.anz.com.au/personal/bank-accounts/term-deposits/</a>, viewed 15 January 2020). The other major banks did not appear to offer a term deposit which does not require the 31 day notice for early withdrawal.

#### The LCR (and NSFR) have distorted bank pricing to the detriment of some savers

- 13. Davis and Maddock (2019) <sup>5</sup> analysed the effects of the Basel liquidity requirements (in conjunction with the Financial Claims Scheme) on distortions in the interest rates paid on bank deposits to different customers. In particular they explain why short term bank deposits, made on behalf of members, by institutional superannuation funds received at that time a substantially lower interest rate than deposits made directly by individuals and self-managed super funds. This result is driven primarily by the classification of institutional super fund deposits as unstable thus requiring higher HQLA holdings and reducing the interest able to be earnt on investment of those deposits. Based on information provided by practitioners the interest rate differential was, at that time, in the order of between 40 to 80 basis points, which was consistent with the predicted effect from analysis of the regulatory treatment. They argued that this was discriminatory against members of institutional superannuation funds compared to self managed super fund (and other retail) depositors, and deleterious to their long run accumulation of retirement savings. They argued that this discrimination could be removed by "extending the depositor protection provided by the Financial Claims Scheme (FCS) to deposits made on behalf of members on a "look through" basis".
- 14. There is no generally publicly available information recently available on the effect of this distortion (which would be expected to be less significant in the low interest rate environment of recent years). Nor is there general public information available on the various innovations which super funds were considering to enable the bank deposits made on behalf of members to count as stable deposits. With the possibility of a return to a higher interest rate environment, further investigation of this distortion is warranted.

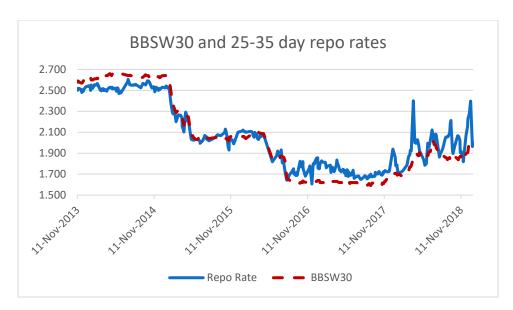
<sup>&</sup>lt;sup>5</sup> Kevin Davis and Rodney Maddock "Depositor protection and bank liquidity regulation: Distortions affecting superannuation" *Australian Economic Review*, June 2019, v52, 2, pp 149-157. http://dx.doi.org/10.1111/1467-8462.12321

<sup>&</sup>lt;sup>6</sup> APS 210 para 34 provides one way in which this could be achieved by adhering to quite stringent, and likely costly, conditions.

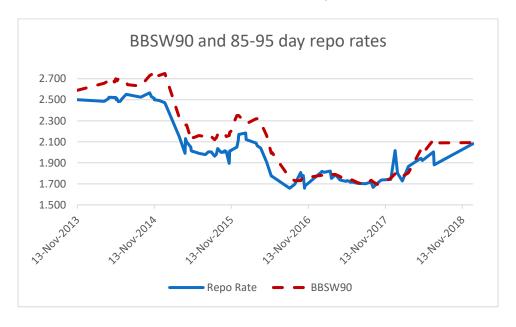
### The LCR has distorted the 30 day bank bill/CD market rendering the 30 day BBSW rate an unreliable indicator

- 15. Because 30 days is the cut-off maturity for deciding whether a bank funding instrument is stable or unstable (an assumed run-off rate of zero or non-zero) the market for instruments of around 30 days maturity is highly distorted. Banks are less willing to issue CDs with 30 days maturity than for longer maturities because of the resulting need to hold HQLA. Moreover, as the remaining maturity of CDs initially issued with longer maturities reduces towards 30 days with the passage of time, banks have an incentive to repurchase those CDs to avoid the resulting jump in required HQLA holdings. This demand by banks to repurchase their paper can be expected to artificially reduce the yield on 30 day paper.<sup>7</sup>
- 16. In the last few years when interest rates have been exceptionally low, it is difficult to identify the extent of the distortion to the BBSW rate. However, prior to that time, some idea of the distortion can be obtained by comparison of BBSW rates and repo rates, where the former incorporate a credit risk (of the issuer) premium while the latter are essentially credit risk free. BBSW rates could be expected to be marginally above repo rates for the same maturity. Unfortunately, private market repo rates are not publicly available, however rates for repos with the RBA are available.
- 17. The figure below shows repo rates for 25-35 day tenure on days when such repos were offered by the RBA together with the corresponding 30 day BBSW since 2013 until end 2018. Since the start of 2015, when the LCR took effect the repo rate is paradoxically higher than the BBSW rate supporting the argument that the LCR induces banks to offer lower rates on 30 day paper (either for new deposits or repurchases of their paper of that maturity outstanding).

<sup>&</sup>lt;sup>7</sup> Banks may also undertake switch transactions with customers, involving exchange of paper of one maturity for another maturity involving a net settlement reflecting price differences. Market participants are still required to report outright rates for each leg of the transaction. <a href="https://www.asx.com.au/documents/products/asx-bbsw-trade-and-trade-reporting-guidelines.pdf">https://www.asx.com.au/documents/products/asx-bbsw-trade-and-trade-reporting-guidelines.pdf</a> (section 3.4).



- 18. This behaviour of the 30day BBSW is supportive of the argument that banks are induced by the existence of the LCR 30 day trigger point to offer lower rates for 30 day bills and CDs to enable their replacement with longer term funding. It calls into question both the validity of the 30 day BBSW as a market indicator rate as well as the use of the 30 day BBR OIS spread as an indicator of bank risk.
- 19. Similar behaviour does not apply in the case of 90 day rates as the following figure illustrates, although even in that case the post 2016 convergence of the BBSW and Repo rate raises questions about the extent to which the bank bill rate fully reflects market views on bank risk premia.



#### Deposit/Debt market competition between MLH and LCR Banks is possibly distorted by the differences in regulation

- 20. Missing from the questions posed in the discussion paper is any mention of the competitive implications of the LCR/NSFR regime applying to some ADIs while others are subject to the MLH approach. While this issue may be considered in the broader review of liquidity requirements planned for 2023, it would not seem possible to consider the competitive implications without reference to the differences in the structure of the regulations.<sup>8</sup>
- 21. The LCR and NSFR requirements only apply to a subsector of the ADI sector in Australia larger banks and foreign branches. For smaller banks and ADIs the simpler approach, known as the Minimum Liquidity Holdings (MLH) approach, applies. Holdings of HQLA must exceed 9% of "Liabilities" (on-balance sheet liabilities (including equity) and irrevocable commitments, less the capital base). (This is roughly equivalent to 9% of assets). Over the last 15 years, the average MLH ratio has been in the order of 15%, increasing in 2021 to around 20% (APRA's QADI statistics provide information).
- 22. A feature of the MLH liquidity requirements for smaller banks and ADIs is that there is no explicit link between the maturity structure or counterparty of liabilities and the required amount of liquid asset holdings. MLH banks thus have no regulatory disincentive to accept short term deposits or issue short term wholesale debt, nor to discriminate between financial institutions and other counterparties in terms of interest rates offered. In general, MLH banks are not substantial issuers of wholesale debt instruments and thus this differential treatment is of limited relevance in that regard. However, there are two other potential effect.
- 23. One is in the market for large retail deposits, of amounts exceeding the FCS cap and thus potentially classified as less stable (with a run-off rate of either 10 or 25 per cent) for LCR purposes. MLH banks can be expected to be able to offer higher interest rates for such deposits, since they do not suffer any regulatory liquidity penalty unlike LCR banks. This would apply for atcall or terms of less than 30 day maturity. However, the regulatory penalty for LCR banks is relatively small, due to the low run-off rates assigned. For longer maturities, the inclusion of a 31 day notice period by LCR banks avoids the LCR penalty, and any NSFR penalty is relatively minor due to such deposits being assigned high ASF weights of 0.95 or 0.90. In practice, if investors have

<sup>&</sup>lt;sup>8</sup> It can also be noted that the liquidity regulations could be expected to reduce inter-linkages between financial institutions subject to LCR/NSFR requirements but the MLH regulation is less likely to reduce interlinkages between that group of banks.

<sup>&</sup>lt;sup>9</sup> The assumed run-off rates are between 5 per cent for FCS-covered deposits with a relationship retail customer to 25 per cent to on-line (non-relationship) retail deposits or those not covered by the FCS.

- a (possibly unwarranted) perception that larger LCR banks are safer (or more likely to be bailed out) than smaller MLH banks, any interest differential may not be sufficient to attract such deposits.
- 24. A second effect relates to acceptance of short term deposits from other financial institutions. The MLH regime allows for a broader range of assets, including deposits at other ADIs, to count as liquid assets. For LCR banks, deposits from other financial institutions, including ADIs, with maturity less than one month are assigned either a 25 per cent run-off rate if regarded as operational deposits, or a 100 per cent rate if non-operational deposits. Accepting at-call operational deposits would thus involve an LCR penalty<sup>10</sup>, which would not arise for MLH banks. While a possible result could be for smaller banks to transfer banking relationships from LCR banks to MLH banks, few of the latter group would appear able to provide such services efficiently in the absence of direct access to the RBA exchange settlement system.
- 25. For the purposes of the NSFR requirement, such term deposits are given only a 50 per cent ASF weighting if greater than 6 months maturity, and a 0 weighting if less than 6 months maturity. In contrast, acceptance of such deposits by MLH banks has no differential consequences for their liquid asset holdings compared to acceptance of other types of deposits. It is thus to be expected that MLH banks would be able to offer higher rates than LCR banks for term deposits of less than one year to other ADIs. (And for the latter, those deposits would count as liquid assets in meeting the MLH requirement, provided that there is no notice of withdrawal and assurance from the counterparty that the term deposit could be broken within two days).
- 26. Overall, it would appear that differences in liquidity requirements may create an unlevel playing field between LCR and MLH banks. The latter have access to a wider range of assets (including deposits placed with other banks) to meet liquidity requirements, but their required liquidity holdings are determined (essentially) by overall balance sheet size without regard to the maturity of liabilities nor counterparty. The net effect on competition is unclear and warrants further examination.

<sup>&</sup>lt;sup>10</sup> By applying a 31 day notice of withdrawal period to longer maturity term deposits, LCR banks would avoid any HQLA penalty, but this would limit their use as operational deposits for the deposit holder.