Depositor protection, bank liquidity regulation, and taxation: Distortions affecting superannuation[#].

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ABSTRACT

This paper explains why short term bank deposits, made on behalf of members, by institutional superannuation funds receive a substantially lower interest rate than deposits made directly by individuals and self-managed super funds. We estimate the potential negative effect on ultimate retirement savings of those members. This inequity of treatment is compounded by the exclusion of such deposits from protection afforded by the Financial Claims Scheme (FCS). We show how extending the FCS to provide coverage to such deposits on a "look through" basis would remove that inequity and should, in principle, remove the rationale for the payment of lower interest rates. We consider the political arguments against extending the FCS and argue that these are of limited merit.

JEL Codes: G21, G28, H55

Key Words: Financial Claims Scheme, Liquidity Coverage Ratio, Superannuation

[#] This paper is based on a larger study with the same title prepared for ANZ Bank by the Australian Centre for Financial Studies available at https://australiancentre.com.au/publication/depositor-protection-bank-liquidity-regulation-taxation-distortions-affecting-superannuation/.

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Introduction

For several years now, short term deposits in Australian banks made by institutional superannuation funds on behalf of their members get paid interest rates which are between 40 to 80 basis points lower than those on deposits from individuals or self-managed super funds (SMSFs). The reason can be found in liquidity regulation, in the form of the Liquidity Coverage Ratio (LCR), to which the large banks have been subject since January 2015. We explain how this anomalous effect arises and demonstrate how it could be easily removed without undermining the operation of the LCR. This involves extending the depositor protection provided by the Financial Claims Scheme (FCS) to deposits made on behalf of members on a "look through" basis. That would remove two inequities induced by regulation. One is the differential in deposit rates paid to different types of super savings, and consequent deleterious effects on ultimate retirement income of members of institutional super funds. The second is to provide such members with equivalent protection available to others against loss of savings from a bank failure.

Section 1 of the paper outlines how the LCR regulation leads to this deposit rate distortion and demonstrates why the gap in deposit rates paid is as large as it is. Section 2 examines some of the consequences arising. One is the size of the likely effect on retirement incomes. A second is how innovations in deposit product design and operating arrangements of super funds could, at a cost, avoid the distortion. A third is potential incentives for individuals to shift from institutional super funds to self-managed super funds (SMSFs) to avoid the interest rate penalty. In section 3, the interaction of the LCR and the FCS is considered to show that a simple way of removing the distortion (via extension of FCS coverage), and removing the inequities referred to above, is available. Section 4 shows how another potential distortion arising from the introduction of the Net Stable Funding Ratio (NSFR) regulation would also be offset by the proposed policy change. Section 5 considers the arguments which are likely to be raised against such a policy change, and argues that they have little foundation. Section 6 concludes.

1. LCR Regulation and Short Term Deposit Interest Rates

The LCR requires banks to hold high quality liquid assets (HQLA) sufficient to meet likely outflows of funds in the event of a 30 day stress situation. The amount of required HQLA is calculated by applying specified "run-off" rates to different types of deposits. Institutional super fund deposits of less than one month tenor are classified as "non-stable" deposits and essentially require the bank to hold an equivalent amount of HQLA. In contrast, similar tenor deposits from individuals or SMSFs are classified as "stable" and require HQLA holdings of only 5 or 10 per cent of the amount of such deposits.[1] Consequently such deposits are, unlike the "non-stable" deposits, able to be invested primarily in loans or other investments with higher expected returns than HQLA.[2]

[1] The regulation is more complex than this simplified description, but those complexities do not affect the arguments made here. Details can be found in APRA's *Prudential Standard APS 210 Liquidity*. https://www.legislation.gov.au/Details/F2017L00047

[2] Of course, money is fungible, such that it is not strictly correct to say that the regulation limits the specific use of funds. We use this terminology as a shorthand way of referring to the limits on overall portfolio allocation resulting from the regulation.

Interest rates paid by banks for funds raised from customers reflect the value placed on such funds via their internal Funds Transfer Pricing (FTP) systems.[3] These, *inter alia*, set prices (interest rates) that reflect the opportunity cost to the bank of raising funds in this way as opposed to alternatives. The FTP prices then reflect alternative rates (the marginal cost of funds) available in the wholesale markets for funds with similar repricing features,[4] as well as any cost differentials arising from restrictions on use of the deposit funds faced by the bank. The LCR creates such a cost differential (a liquidity premium effect implying a lower value attached to raising non-stable deposit funds) by restricting the use of short term deposits from institutional super funds to investment in HQLA.

How much is this differential (liquidity premium/discount) likely to be? For household or SMSF short term deposits, the assumed run-off rate is in the order of 5 - 10 per cent.[5] We assume 10 per cent. Thus only 10 per cent of such funds have their use restricted to HQLA rather than being available for investment in other higher yielding assets such as mortgages. In contrast, 100 per cent of the "unstable" deposits from institutional super funds are required to be invested in HQLA. In determining what "discount" to apply to rates paid for such funds, the net income lost from this restricted use needs to be considered. We assume that the net return on mortgages versus investing in government securities (HQLA) is approximately 100 basis points. This is based on assuming a mortgage interest rate approximately 250 basis points higher than government security rates,[6] and annual operating costs of 150 basis points higher for investments in mortgages than in government securities. The portfolio of assets which can be funded with retail deposits thus has a potential return of 90 basis points higher than that which can be funded by the institutional super fund deposit.[7]

However, the operation of the LCR in Australia is modified by the ability of the banks to access the Committed Liquidity Facility (CLF) at the Reserve Bank to meet part of their LCR requirement.[8] By using self-securitisations of mortgages, the banks create eligible collateral to use in repurchase agreements for accessing the CLF should that be needed. So some part of non-stable deposits can be used for investment in mortgages rather than HQLA to create these self-securitisations. The cost of this part, in the order of one half,[9] of the LCR is then the 15 basis point CLF fee charged by the RBA plus the operational costs associated with self-securitisations. Assuming 10 basis points for such operational costs, the overall cost of the half of the LCR requirement associated with the CLF is then 25 basis points.

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[3] The ultimate pricing to customers will also depend upon margins applied to the FTP rates by bank business units to cover operating costs and in reflection of bank funding and marketing strategies.

[4] "Repricing" refers to the earlier of the time until the interest rate paid on those funds can be changed or maturity.

[5] Most such deposits meet the requirements to be accorded a 5 or 10 per cent run-off rate, and the run-off rate estimates for "retail and small business" provided by banks in their Basel 3 required disclosures are consistent with this.

[6] Over July 2017 to June 2018 the 3 year government bond rate averaged 2.07 per cent while the owner-occupied standard variable rate and 3 year fixed rate mortgage rates averaged 5.20 per cent and 4.01 per cent respectively. (Source: RBA Statistical Tables F2.1 and F5).

[7] The FTP systems of the banks are more complex than this simple example suggests, but the example captures the main effect of the liquidity cost premium involved.

[8] Terms and conditions for the CLF are available at https://www.rba.gov.au/mkt-operations/resources/tech-notes/pdf/clf-terms-and-conditions.pdf

[9] For 2019, $243 billion CLF in aggregate was to be made available and the available stock of government securities for meeting the LCR is estimated to be $225 billion. See https://www.apra.gov.au/sites/default/files/letter_-_aggregate_results_on_the_committed_liquidity_facility_3.pdf

Taking the average of the estimated HQLA cost of 90 basis points and the CLF cost of 25 basis points gives a figure of 57.5 basis points which is a ball-park estimate of the break-even gap (on the assumptions made) between the FTP rates for retail versus institutional superannuation fund deposits. Rates offered to depositors would be lower than these rates to reflect operational costs involved in attracting and managing deposits. If anything, higher operational costs associated with retail deposits would tend to reduce the gap somewhat. While there is no public data source available, information from market participants suggests that the difference has ranged over time between 30 to 80 basis points.

2. Consequences

The regulators are well aware of this interest rate differential effect arising from the LCR ratio, and there is some provision in the regulations for partial avoidance of the effect. Under certain conditions (outlined in APS 210, Para 34) "cash funds", where the member has elected to have all their superannuation balance in a cash option offered by the fund, the deposits could be treated as stable and largely avoid this effect. But it requires some stringent conditions, including agreement by the super fund (and the member) to invest all those funds with a specified bank and not shift without at least six months notice. This limits the ability of the super fund to easily take advantage of better returns at competitor banks – to the detriment of members. More significantly, the exemption is not available where deposits are only part of the member's total funds, of which "cash" is only one component – such as when the member elects a balanced or other portfolio mix option offered by the fund.

How substantial is the effect on super fund member returns and accumulation of retirement savings? While no publicly available information exists on the size of institutional super fund deposits, we estimate that they are somewhere in the range of $100 -$250 billion and take $130 billion as a reasonable "ball-park" figure.[10] Taking a conservative figure of the interest rate differential effect of the LCR of 40 basis points p.a. means that super fund income is reduced by about $520 million p.a. This is equivalent to a reduction in the total return on super fund investments of about 3-4 basis points p.a. (At March 2017 total assets of institutional super funds were $1,455 billion). At the individual investor level, we assume the effect is to reduce the average real return by about 4 basis points p.a. (compared to an average real return of around 4.6 per cent p.a.). Assuming a balanced portfolio option (with about 10 per cent cash) over a 40 year working life for an individual with average weekly earnings, the effect on weekly retirement income is around $11.50 per week.[11]

One possible consequence is that some individuals may be more inclined to move into SMSFs. The return on the cash component of their investments would not face this interest rate penalty, and FCS coverage can be achieved by spreading deposits across banks to avoid breaching the $250,000 cap.

[10] That is approximately 7.5 per cent of total institutional superfund assets. APRA's 2017 Annual Fund Level Superannuation Statistics (Table 9) reports "cash" (which includes more than short term deposits) as 12.5 per cent of total investments.

[11] The assumptions underlying this calculation are available in the longer paper available at https://australiancentre.com.au/publication/depositor-protection-bank-liquidity-regulation-taxation-distortions-affecting-superannuation/

Lower returns on deposits of less than 30 days maturity have naturally led to innovations in deposit contracts to get around the effect of the regulation. One such innovation has been the growth in 31 day notice of withdrawal deposits. Such deposits are treated as "stable" and command a higher interest rate. However, the super fund is forgoing the benefit of liquidity.

Another potential effect is for super funds to "redefine" the meaning of their cash portfolio, including investments other than bank deposits which offer higher yields, but involve risks not typically associated with "cash" investments.[12]

3. The Financial Claims Scheme and the LCR

Coverage of deposits by the FCS is an important determinant of whether a deposit is treated as "stable" for the LCR. Given the protection provided by the FCS, there is much less risk of such deposits fleeing the bank at a time of crisis. Large deposit amounts, of many millions, by the fund trustee on behalf of members each with a relatively small amount in the fund are not covered by the FCS, other than for the first $250,000. The members' funds held in bank deposits are thus effectively not covered by the FCS, even though few would have in excess of the $250,000 limit.

One consequence of this is that institutional super funds could be expected to withdraw deposits in a time of crisis, and hence the designation of these deposits as "unstable" is logical given the current application of the FCS. That potential instability is reinforced by the concerns funds will have over counterparty risk, with deposits adding to the fund's holdings of shares and wholesale debt securities as part of total exposure to the bank. Because the trustee makes one decision on behalf of all members, the regulators correctly perceive a risk of flight of such deposits in a time of crisis.

But the logic of the current designation of such deposits as unstable would no longer hold if a "look through" approach was applied to recognise the large institutional deposit as being composed of many smaller amounts on behalf of members and thus warranting FCS coverage. No longer should the institutional super fund feel the need to withdraw protected deposit funds in a time of crisis, thus making them eligible for designation as "stable". (Of course, to the extent that some members had in excess of $250,000 involved there could remain an incentive for the trustee to withdraw those excess balances. However, a likely behavioural response would also be for the super fund to allocate such balances across a number of banks to avoid breaching the cap at any one bank, enabling them to offer members the surety of FCS protection of the entirety of their deposit balances).[13]

Applying the FCS on a "look through" basis to such deposits thus has the merit of making them fit the definition of "stable" deposits. This would remove the reason for the payment of lower returns on such deposits by banks and the penalty this imposes on members of institutional superannuation funds compared to those in SMSFs.

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[12] APRA noted concerns with super funds broadening the range of assets included in "cash" investment options in a letter to super funds on 29 June 2018. (https://apra/gov/au/sites/default/files/letter_cash_investments_options_non-cash_holdings_industry_guidance_june_2018.pdf).

[13] There still remains the complication and risk for the member that they have in excess of $250,000 of total deposits at the one bank once deposits outside of super are considered.

But another reason for adopting a "look through" approach is on the grounds of equity. It is anomalous that bank deposits of individuals made via this route are not protected, but would be if they had been made directly. It is even more anomalous when it is recognised that the funds involved are often compulsory savings required to be made under superannuation law, and managed by prudentially regulated super funds encouraged by legislation to perform that role.

4. The NSFR and Superannuation Fund Deposits

While the NSFR requirement formally took effect at the start of 2018, the Australian banks had been adapting their balance sheet structures to meet the requirement for several years previously. The NSFR requires banks to more closely match their use of longer term (over one year) funding ("available stable funding" or ASF) to their longer term commitments of funds ("required stable funding" or RSF) to borrowers.[14] The constraint this puts on bank portfolio choice makes short term funding less valuable to the banks than otherwise would be the case, and reduces the interest rate paid on shorter term funding relative to longer term tenors. However, the regulations treat short term retail deposits covered by the FCS as having a high ASF component, given the "stickiness" imparted by FCS coverage.

The distorting effect of the NSFR on interest rates paid to short term institutional versus retail deposits, arising from less ability to use the former to fund longer term loans and investments, is likely much less than in the case of the LCR. The argument required to assess the likely magnitude of effect is subtle. Consider first the case where a bank only invests in risk free securities of different maturities. Short term retail (FCS covered) deposits can finance long term securities, but short term institutional deposits can only finance short term securities. This means that the bank cannot earn any liquidity term premium available in the yield curve from investing the institutional deposits.

In fact, this liquidity term premium is the only source of a lasting difference. At any time, the yield curve slope could also incorporate an expectations component, but "riding the yield curve" by using short term funds to make long term investments will not generate expected profits if expectations are unbiased. Another factor may be the existence of higher credit spreads on longer term private sector debt. However, to the extent that credit spreads are equal to expected default loss, this also does not provide a long term profit advantage from using short term deposits to make longer term loans. Only if there is an additional liquidity term premium in private relative to risk free yields, or if credit spreads incorporate an additional risk premium which varies with maturity, will there be additional effects.

How much is the liquidity term premium? There is a large literature arguing that the term premium is variable over time and that there may be a risk premium associated with that variability. For current purposes, we assume that the relevant term premium involves comparison of rates for less than one year with those for a term of around three years (which is a common term for bank fixed rate loans). We take a figure in the order of 25 basis points as a ball park figure for the liquidity

[14] The regulation is more complex than presented in this simple description, involving differential weights being given to sources and uses of funds based on characteristics such as counterparty and maturity. Details can be found in APRA's *Prudential Standard APS 210 Liquidity*.
https://www.legislation.gov.au/Details/F2017L00047

premium difference and the magnitude of potential negative effect of the NSFR on FTP rates for shorter term funding relative to "available stable funding".[15]

To avoid this interest rate penalty for institutional deposits of under a year arising from the NSFR, a similar innovation to 31 day notice of withdrawal deposits has emerged. These are "31 day notice of conversion" deposits, whereby the conversion is of the deposit into a negotiable certificate of deposit (NCD) with 6 or more months remaining maturity. For the investor, the NCD can be sold in the wholesale market to other investors enabling access to cash after the 31 day notice period, while for the bank, there is no cash outflow until redemption of the NCD until its maturity 6 months or more hence.[16] Consequently, such deposits go some way towards meeting the required stable funding requirement of the NSFR, are treated as "stable" under the LCR, and thus impose less constraints on bank portfolio allocation.

5. Changing FCS Coverage: Pros and Cons

We have argued above that there is a case for extending FCS coverage to deposits of institutional super funds on a "look through" basis to provide equivalent protection to deposits made on behalf of super fund members as applies to deposits made directly by individuals or SMSFs. The arguments for doing so are:

- it would enable APRA to reclassify such deposits as "stable' under the LCR regulation and remove the cause of the interest rate penalty which currently exists;
- it would provide super funds with more flexibility in allocating funds between banks and thus facilitate increased competition, by removing one component of counterparty exposure the funds have to banks
- it is arguably unfair to provide differential FCS protection to individuals based on whether their deposits are made directly or on their behalf by institutional super funds
- It removes this cause of lower super fund returns and lower ultimate retirement savings of members of institutional super funds
- It removes a distortion which may increase incentive for individuals to move to SMSFs
- The currently lower returns on cash portfolios of super funds can lead to inclusion of more high risk assets in such portfolios in search for higher yields.

Undoubtedly there would be some complications in implementing such a "look through" approach. FCS protection is applied up to a cap of $250,000 per depositor in a bank, and there would need to be some way of aggregating deposits made directly by the individual and on their behalf by the super fund in applying that cap. Also, some members of the fund might have in excess of the cap amount in the super fund cash portfolio, such that the fund may see some part of the total as involving a credit exposure to the bank and being at risk of loss from a bank failure. The proportion of members in such a situation is likely quite small, and for those cases systems could be developed to allocate funds across different banks to avoid breaching the cap.

[15] The average difference over the four years ending 30 June 2018 between daily zero coupon rates for 0.5 years and 3 years (calculated by the RBA) was 22 basis points. (Source : RBA Statistical Table F17(hist)).
[16] The choice of a 6 month remaining maturity reflects that there are some benefits (from classification as partly available stable funding) in meeting the NSFR requirement from use of funding with 6 or more months maturity.

There are costs in dealing with these complexities, but it can be expected that if a "look through" approach is not adopted super funds will, over time, find ways of innovating to provide FCS protection to their members. This could involve, for example, opening individual bank deposit accounts in each member's name and managed by the super fund. Advances in technology make that possible at relatively low administrative cost. But the "look through" approach is arguably less administratively costly.

What other arguments might be advance against the "FCS look through" proposal for super fund deposits? One is that APRA may be uncomfortable in designating the deposits as stable, since they are still under the control of the super fund which could decide to shift the deposits to an alternative bank. However, if FCS coverage applies, there is no reason for the fund to take such an action in a crisis period. If, on the other hand, they do so because the interest rate offered by the bank is not attractive that reflects competition and market discipline which is to be encouraged.

A second argument is that the expansion in the amount of deposits covered by the FCS means an increase of maybe $100 -250 billion in the contingent liabilities of the government which were estimated in recent budget papers at around $850 billion. There are three counterarguments to this.

The first counterargument is that such figures are a nonsense, based on an inappropriate measurement of contingent liabilities. The $850 billion is the total amount of deposits covered by the FCS, not the potential cost to the government that might occur under any realistic scenario. The $850 billion cost would require all banks to fail at the same time and for APRA to recoup nothing from its claims on remaining bank assets resulting from its payments to protected depositors.

The second counterargument is that, particularly in the case of the large banks, APRA will be able to recoup the total of its FCS payments because it becomes a preferred claimant for that amount on the failed bank's remaining assets ahead of the claims of uninsured depositors and creditors. Since insured deposits are around 30 per cent of total assets of the major banks, the value of the bank's assets would need to decline by around 70 per cent before there were insufficient assets for APRA to get full recoupment of amounts paid out. The probability of such a decline is exceedingly low and thus the contingent government liability is also exceedingly low. Moreover, should such an unlikely eventuality occur, the government is able to levy remaining banks to recover its costs.

The third counterargument is that analysis of political realities would indicate that "implicit insurance" already exists. What would happen if a bank failed and super fund members were about to lose that part of their retirement savings held as bank deposits? It is hardly credible to imagine that the government, which requires compulsory retirement contributions which are managed by prudentially regulated super funds, would not provide compensation.

Another argument which might be advanced against the proposal is that affording FCS coverage to these deposits would remove them from the liability base to which the major bank levy of six basis points is applied, thus reducing government revenue.[17] That is true, but could be easily offset by increasing the levy rate by one or two basis points.

A further source of opposition might come from asking who would bear the consequences of higher interest rates being paid on the super fund deposits? To answer this, note that the source of the current distortion is the requirement that super fund short term deposits can essentially only be used by the banks to invest in assets satisfying the HQLA requirements of the LCR regulation.

[17] The major bank levy is essentially applied to bank liabilities other than deposits covered by the financial claims scheme.

Removing the distortion would mean that banks would have reduced demand for HQLA assets (government securities) and for the amount of CLF needed. Yields on government debt could be expected to increase, and government revenue from the 15 basis point charge for the CLF would decline. Thus it would be the government budget which would bear the cost of the higher returns on super fund deposits and the resulting higher return on superannuation savings. Ultimately whether such a change is desirable is a political decision, albeit one with distributional consequences.

6. Conclusion

We have argued that a strong case exists for applying FCS to super fund bank deposits on behalf of members on a "look through" basis. Doing so could, in principle, remove much of the distorting effect of LCR regulation and its impact on cash returns of institutional super funds. Currently the resulting distortion is that interest rates on short term deposits of institutional super funds are in the order of 40-80 basis points p.a. lower than similar deposits made by individuals.

There are, undoubtedly, administrative complications involved in making such a change. However, if such a change is not made, innovators in banks and super funds are likely to find other ways to structure arrangements for members accounts which lead to FCS coverage. We are of the view that it is simpler to apply the FCS on a "look through" approach to remove the distortion at its source.