Box C

What Did 2020 Reveal About Liquidity Challenges Facing Superannuation Funds?

The management of liquidity is essential for the superannuation industry. If liquidity is not managed well, superannuation funds may have to sell assets quickly, potentially for a value less than expected or, in extreme situations, refuse to honour member obligations, including requests for portfolio changes.[1] The substantial size of the superannuation industry in Australia means that poor liquidity management could potentially have a systemic impact. Super funds regulated by the Australian Prudential Regulation Authority (APRA) manage $2.0 trillion in assets or around 100 per cent of annual GDP. If super funds needed to sell assets on a large scale, it could amplify asset price declines during periods of stress. This could also have flow-on effects to the banking sector or particular banks as super funds (including self-managed funds) own one-quarter of Australian banks' short-term debt and equities and account for almost 10 per cent of banks' deposits. If funds (or their members) were to experience liquidity strains this could create deposit outflows at banks that manage super funds' investment (as opposed to transactional) savings accounts.

During 2020, the superannuation industry faced significant liquidity management challenges due to 3 factors that arose simultaneously:

1. increased propensity of members to switch out of more risky (and so generally less liquid) investment options;
2. funds' increased need for liquid assets to meet margin calls on hedges (held to reduce foreign currency risks); and
3. a temporary relaxation of the system's preservation rules, the Early Release Scheme (ERS), which enabled members to withdraw up to $20,000 from their superannuation balance if they had been adversely impacted by the pandemic.[2]

In response, super funds substantially increased their liquidity: aggregate cash balances increased by $51 billion over just the March quarter 2020. A portion of this was subsequently unwound as funds made ERS payments. This accumulation of cash occurred in an environment of heightened demand for liquidity across the financial system and reduced depth in various markets. To fund the move into cash, super funds were sellers of bonds, foreign equities and equity units in investment funds (Graph C.1). While these events showed that funds were able to manage liquidity well in fairly extreme circumstances, some aspects of their liquidity management plans could be updated.

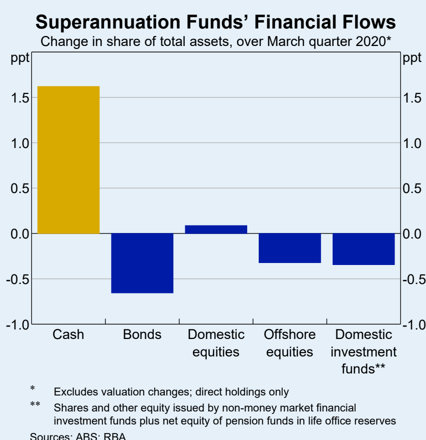
Member switching into cash was sizable in March 2020

Around half of the increase in super funds' cash holdings over the March quarter 2020 was due to members choosing to switch from higher-risk investments into cash. While this was equivalent to only

around 1½ per cent of funds under management (FUM) for the system as a whole, it was substantially larger for some super funds. Data collected from 30 funds show that these flows were as high as 3–4 per cent of FUM for several large funds and 8 per cent for one medium-sized fund (Graph C.2). The size of these flows were larger than previous market dislocations – including the global financial crisis.[3]

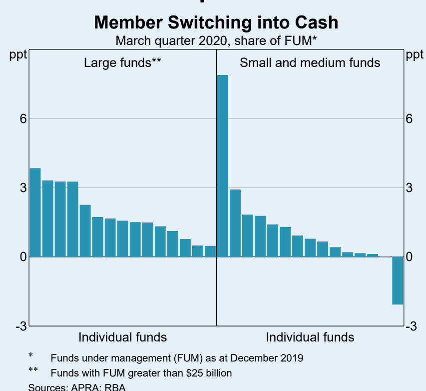
Switching into cash was driven by a small pool of active members who switched large amounts. These members were generally closer to retirement with larger average balances (Graph C.3). Most of the switching into cash came from diversified investment options, particularly balanced and growth options due to their high weightings to shares and other growth assets. By contrast, switches out of default *MySuper* products were small.

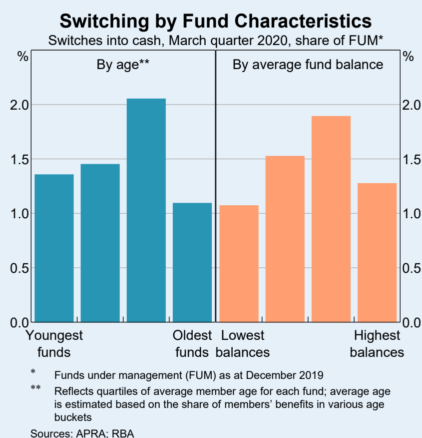
Super funds retained substantial liquidity positions in their diversified investment options despite the magnitude of switching. Funds sold their highly liquid assets (equities and fixed income securities; see Graph C.1) to meet switching requests. However, even after this, the majority of funds still had at least 40 per cent of their portfolio allocated to very liquid assets and a further one-third to moderately liquid assets (those that can be sold within 3 to 30 days).



Funds also needed cash to cover large derivative margin calls …

Funds also required cash to cover margin calls against currency (and other) derivatives. Super funds use currency derivatives to hedge foreign exchange (FX) rate risk on their investments that are denominated in foreign currencies. Australian-regulated super funds

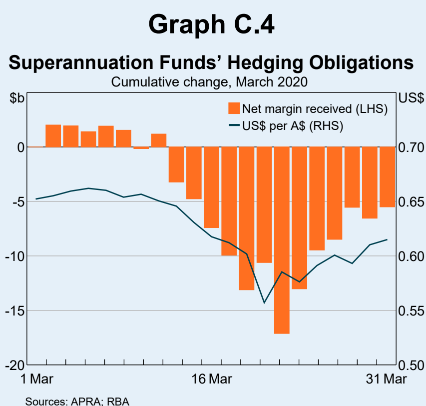




invest around 35 per cent of members' funds offshore and survey data indicate that around 40 per cent of these offshore investments are hedged.[4] When the Australian dollar depreciates, the value of these derivatives declines, requiring super funds to make payments to their counterparties to mitigate the risks arising from these mark-to-market losses.

During the first half of March 2020, the Australian dollar depreciated by 15 per cent. As a result, super funds had to pay in excess of $17 billion of margin to their counterparties (Graph C.4). Around half of these payments flowed to the 4 Australian major banks, which, in contrast to super funds, have net US dollar liabilities. The remainder was primarily paid to foreign investment banks. These margin flows were mostly associated with funds' FX forward contracts. Some of this margin was returned to – and likely retained as cash by – super funds as the Australian dollar recovered in late March.

It appears that funds partly managed this requirement by selling some of their underlying foreign currency assets. Fund-level data show that funds with larger hedging ratios going into the pandemic



tended to sell larger shares of foreign equities than other funds. This illustrates that, in most circumstances, the liquidity risk involved with foreign currency hedging is at least partly mitigated by the depreciation of the Australian dollar also lifting the Australian dollar value of underlying foreign assets. This, in turn, supports funds' ability to sell some of these foreign assets and close part of their hedging contracts. Overall this indicates that super funds' hedging strategies are robust.

… and the early release scheme added to liquidity challenges

Superannuation 'preservation rules' require that member benefits are retained within the superannuation system until members reach retirement age, unless there are compassionate grounds or instances of severe financial hardship. Recognising the worsening economic environment, the Australian Government temporarily changed the eligibility criteria for early release of superannuation in April 2020 under the ERS. This resulted in $36 billion of ERS withdrawals, equivalent to 2 per cent of FUM as at December 2019. Around half of that occurred during the June quarter.

A number of large funds paid out more than 5 per cent of FUM under the ERS (Graph C.5). As expected, funds most exposed to early release flows were those with a greater proportion of members that were young and worked in industries most affected by the pandemic.

At the time of the initial announcement of the ERS, funds with younger members and those in pandemic-affected industries cautioned that they could lose as much as one-fifth of their FUM or more within a matter of months. However, household incomes and employment fell by less than

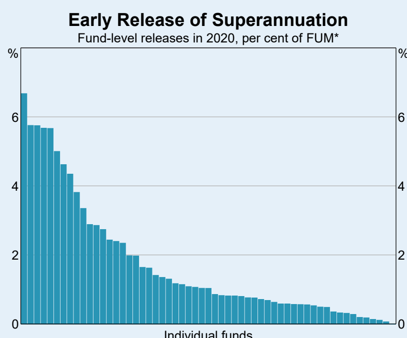
anticipated and so withdrawals were smaller than expected. In addition, they were fairly evenly spread over time, which helped funds to manage the additional demand for liquidity. The improved functioning of markets after the market turbulence in March and early April also enabled funds to more easily sell fixed income securities and equities. Funds also moved quickly to prepare for the ERS, by selling equities ahead of the commencement of the scheme on 20 April 2020.

Events during 2020 showed that funds manage liquidity well, but can improve some aspects

The financial impacts of COVID-19 provided a significant test of super funds' liquidity management in March and April. However, their liquidity management practices proved to be effective in navigating through these challenging times.

One reason that funds withstood the challenge of all 3 liquidity risks materialising at the same time was that each tended to have the greatest impact on different funds. In particular, member switching activity was driven by older investors with larger superannuation balances, while early withdrawals were driven by younger members more exposed to the economic and financial impacts of the pandemic. This meant the liquidity risks were spread across members rather than being concentrated. Given this, and differences in the membership base of super funds, very few funds experienced both sizable member switching and ERS outflows.

Graph C.5



* As at December 2019; captures funds with funds under management (FUM) greater than $5 billion

Sources: APRA; RBA

Another reason funds successfully navigated the period was that members' behavioural switching responses were qualitatively consistent with funds' expectations – even if on a larger scale – which enabled them to quickly and pre-emptively rebalance their portfolios towards cash. However, the magnitude of switching activity exceeded funds' liquidity scenario analyses as it was much larger than historical episodes. As the population ages and the superannuation system matures, it is reasonable to expect the scale of member switching activity to increase in the future as members become more alert to the performance of their investments. This could add to the liquidity challenges associated with funds shifting from an accumulation phase – with total contributions exceeding benefit payments – to a drawdown phase as the superannuation system matures.

Finally, robust liquidity management practices and prudential oversight meant that the industry was well placed to accommodate this particular liquidity episode. APRA requires funds to maintain a 'Liquidity Management Plan' (LMP) for each investment option. These plans establish the procedures for monitoring and managing liquidity on an ongoing basis, including how funds will manage cash flow using liquid assets (particularly cash) in their default (and

other) investment options. If liquidity stress arises to the extent that it cannot be met by a super fund's existing resources, they can also – as a last resort – refuse to honour member requests to switch investment allocations or (with APRA approval) member redemptions. The sophistication of LMPs has strengthened considerably since the 2008 financial crisis, as funds worked closely with APRA to ensure they had suitable plans for both normal times and when an idiosyncratic event affects a fund.[5]

The events of 2020 have also revealed some areas where funds can update their liquidity management practices. In particular, APRA has called on funds to re-examine their LMPs in light of the period, ensure they include these insights into planning for future events and embed the results of their stress tests into practice.[6] In addition, funds need to consider the extent to which they rely on liquidity from certain assets (such as sovereign bonds) under stressed market conditions and whether there are alternative ways to transact when market depth is reduced. ✠

Endnotes

[1] Over four-fifths of super fund assets in Australia are held in defined contribution funds, which do not offer guaranteed returns to members.

[2] An additional factor that generates liquidity risk at the fund level is the ability of members to quickly rollover between funds.

[3] While fund-level switching data do not date back to the global financial crisis, research indicates that the size of member switching flows was small during this period, and not enough to pose liquidity issues for funds (see Gerrans P (2012), 'Retirement Savings Investment Choices in Response to the Global Financial Crisis: Australian Evidence', *Australian Journal of Management*, vol 37(3), pp 415–39).

[4] NAB (2019), 'NAB Superannuation FX Hedging Survey 2019', 27 August.

[5] Funds use a number of liquidity management techniques, such as cash-flow monitoring procedures, relying on the liquid assets in the fund's default option, establishing liquidity valuation policies and incorporating expected liquidity in their business plans.

[6] See APRA (2020), 'Managing Super Fund Liquidity in the Midst of COVID-19', *Insight*, Issue 3; and APRA (2020), 'The Superannuation Early Release Scheme: Insights from APRA's Pandemic Data Collection', *Insight*, Issue 4.