Superannuation liquidity management and investment in private markets

May 2025

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Contents

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Summary

Superannuation is a long-term financial savings structure, typically spanning over 40 years. This extended timeframe enables superannuation funds to adopt a long-term investment approach, helping members weather short-term market downturns and volatility.

Given this extended investment horizon, superannuation funds often allocate a modest portion of their portfolio to 'private market' or unlisted assets, such as private equity, private credit, property and infrastructure. These unlisted asset classes can offer appealing features compared to listed assets, including higher returns, lower risk, reduced volatility and improved portfolio diversification.

Australian investors have been pioneers in investing in unlisted assets, particularly infrastructure. This innovation has caught the attention of global investors who are now seeking to increase their exposure to these asset types, recognising the positive Australian outcomes for superannuation fund members.

Indeed, the returns from unlisted asset classes have enhanced member outcomes over several decades, delivering higher returns after fees and lower risk than comparable listed asset classes. They allow funds to optimise portfolio construction for members leveraging the inherent system characteristics including predictable cashflows and typically long investment horizons. Notwithstanding this, these unlisted asset classes do require consideration of liquidity risks. Funds manage this risk closely to ensure they can fulfil member entitlements, especially during market stress events. This was evident during the March 2020 COVID market period, with both APRA and the RBA noting that superannuation funds had managed liquidity well during this time.

Any changes to the current superannuation preservation rules, allowing members to access their funds pre-retirement, or contribution rules allowing members to opt-out or reduce Super Guarantee contributions, would necessitate funds to reevaluate their investment strategy. This could mean adopting a shorter-term view, potentially investing more in cash or short-term credit instruments for increased liquidity and reducing exposure to unlisted asset classes. It could also impact the flexibility of funds to invest capital tactically (such as purchasing assets at a discount) and also impact on availability of capital to other market participants, particularly at times of systemic stress.

Considering the benefits of unlisted asset classes, imposing greater liquidity constraints could negatively impact members' long-term returns. Frontier’s analysis indicates that this decrease could range between 0.3 – 0.6% p.a. Such a decrease could result in the average member having between $150,000 and $300,000 less at retirement (in today's dollars).

Introduction

Australian superannuation funds are large institutional investors that invest capital on behalf of Australian investors. Superannuation funds are required to invest the capital in members' best financial interests, recognising the legislated objective of superannuation –

"to preserve savings to deliver income for a dignified retirement, alongside government support, in an equitable and sustainable way"

Before retirement, Australians can only access their superannuation savings in limited circumstances. For most people, superannuation is a longer-term investment. Due to the rules underpinning the system and long-term nature of the superannuation capital pool, superannuation funds can invest over long time horizons.

Reflecting this long-term horizon, superannuation funds have invested a moderate proportion of their portfolio in 'private market' assets, such as private equity, private credit, property and infrastructure. The one common factor between all 'private market' asset classes is that these comprise investments that are not publicly traded ("unlisted") and are often considered 'illiquid'.

Superannuation funds invest in unlisted asset classes that may have more attractive characteristics than listed assets, such as higher return, lower risk, lower volatility and can provide beneficial economic diversification in portfolios. However, they do so while targeting and maintaining a prudent level of total liquidity to ensure they can pay members when required.

APRA, under SPS 530, requires that superannuation trustees effectively manage liquidity risks, especially in volatile and uncertain economic conditions. This involves monitoring and assessing liquidity needs in response to member behaviour and external conditions.

The purpose of this paper is to consider the implications of changes to the preservation rules, particularly where it may require greater liquidity requirements for funds. We analyse whether this may result in a lower allocation to private markets, and the impact on superannuation fund members retirement balances.

We have divided this report into four sections:

- Section A provides a background to superannuation fund liquidity, including how much funds invest in private assets.
- Section B details the benefits of unlisted assets, with a detailed description in the appendix.
- Section C discusses how superannuation funds manage the liquidity of their portfolios, in particular the modelling they undertake to ensure they can pay members' benefits as required.
- The last section, Section D explores (by way of example) the use of superannuation for first-time homebuyers, to access their superannuation savings for housing purposes.

Super Members Council of Australia commissioned Frontier Advisors to prepare this research paper.

Section A – Superannuation fund investment in illiquid assets

Superannuation fund investment in illiquid assets

The Australian superannuation sector is an increasingly important part of the financial system. Total assets of APRA-regulated superannuation entities were approximately $2.7 trillion as at 30 September 2024, with around $430 billion invested in unlisted/private market assets such as property, infrastructure, private credit and private equity.

The one common factor between these unlisted asset classes is that these comprise investments that are not publicly traded and are often considered ‘illiquid’.

Liquidity

Liquidity refers to the efficiency or ease with which an asset or security can be converted into ready cash without affecting its market price over a defined time period.

‘Liquid’ asset classes such as equities and bonds typically can be converted easily and quickly to cash given they are tradeable on a secondary market. ‘Illiquid’ asset classes cannot typically be converted quickly, or not without a substantial impact on the price.

The most liquid asset that funds allocate to is cash itself, although in 2018 APRA clarified the use of terms like ‘cash’ and ‘enhanced cash’ in investment products to ensure they are not misleading to investors. APRA's concern was that some products labelled as ‘cash’ or ‘enhanced cash’ include investments that are not truly cash or cash-like, such as corporate bonds, credit-default swaps, residential mortgage-backed securities and other credit instruments – and therefore have different risk and liquidity characteristics to cash.

In a RBA review of the COVID period, they noted that bond market liquidity declined, and bid-ask spreads increased notably as bond dealers became constrained in their ability to undertake more trades.

As such, assets that are classified as liquid and illiquid exist on a spectrum of liquidity that needs to be understood by superannuation funds from a bottom-up perspective.

Characteristics of superannuation funds

Superannuation funds in Australia are typically long-term investors due to the rules governing the system and the nature of their purpose. These funds are designed to provide a means of saving for retirement, which is inherently a long-term goal. They invest on behalf of members who will typically be invested for 40+ years before they need to access their savings in retirement.

Funds typically have a long-term investment strategy that is designed to weather short-term market fluctuations and provide solid returns over the long term. This long-term investment horizon aligns well with investments in longer-term, more illiquid assets. Super funds can afford to have the money they invest for their members locked up for a longer period, allowing them to optimise their portfolios and reap the benefits of these investments for members.

However, while superannuation fund members in most circumstances can’t access their funds until retirement, there are some rules in the system which permit fund and investment choice. For example, members can switch their funds between different funds or within-fund options (e.g. from Balanced to Growth). To cater for this, funds need to maintain a sufficient level of liquidity.

Superannuation funds have not historically relied on selling assets to meet short-term liquidity requirements. Strong growth in assets and membership, mandatory employer contributions and positive investment returns have meant that benefit payments and outward rollovers to other funds have been met from regular net cash inflows rather than from asset realisation. This approach increases investment efficiencies and reduces transaction costs and capital gains taxes which, taken together, are passed onto members in the form of higher net returns.

Typically speaking, funds with a younger membership base and strong positive cash flows are better positioned to invest in unlisted assets than a fund with an older member base and negative cash flows.

Overall, superannuation funds typically have low liquidity needs to meet member benefits. Funds will maintain some liquidity to allow them to take advantage of shorter-term market opportunities. In addition, funds need to ensure liquidity is available for new investments into unlisted assets.

Superannuation investment in unlisted assets

As at 31 December 2024, APRA-regulated superannuation funds invested $455 billion in unlisted assets, representing 17% of their total assets. This is broken down as per the following, and comprises both Australian and global assets:

Table 1a: Asset allocation as at 31 December 2024

Asset class	Listed ($b)	%	Unlisted ($b)	%
Equities	$1,509	55%	$124	5%
Fixed income	$528	19%	$28	1%
Property	$72	3%	$109	4%
Infrastructure	$33	1%	$193	7%
Cash	$93	3%	-	-
Alternatives	$40	1%	-	-
Total	$2,274	83%	$455	17%

Source: APRA, Quarterly superannuation industry publication, December 2024

Table 1b: Asset allocation by fund type as at 31 December 2024

Asset Class	Corporate	Industry	Public Sector	Retail	Average
Private Debt	0.3%	1.0%	0.7%	1.3%	1.0%
Private Equity	4.1%	5.1%	6.4%	2.6%	4.5%
Unlisted Property	5.8%	5.1%	4.8%	1.5%	4.0%
Unlisted Infrastructure	5.7%	9.7%	8.6%	1.7%	7.0%
Total	15.9%	20.9%	20.5%	7.1%	16.5%

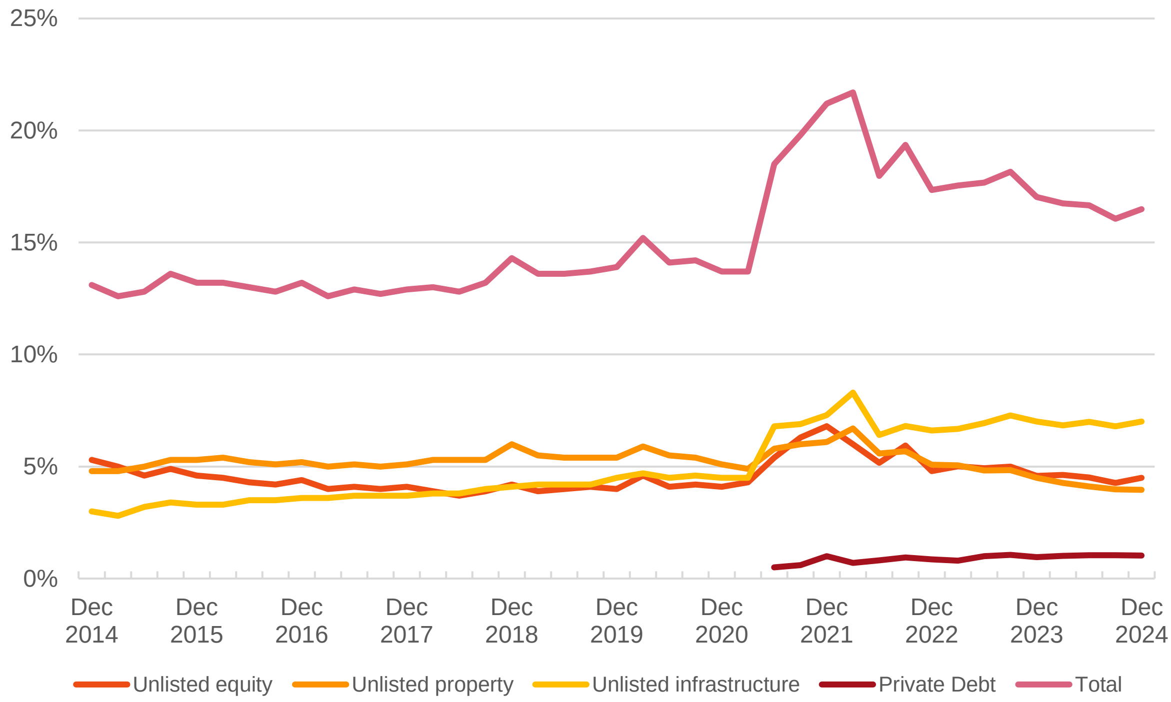
Source: APRA, Quarterly superannuation industry publication, December 2024

While in absolute terms the investment in unlisted asset classes is significant, it remains a relatively small proportion of total superannuation assets. Within equities and fixed income, the listed exposure dwarves the exposure to unlisted assets. Property has slightly more exposure via unlisted assets than listed. It is only the infrastructure asset class where the unlisted exposure is significantly greater than listed.

Chart 1 shows how the average allocation to private markets by superannuation funds has evolved over time. This shows a reasonably stable allocation to unlisted property and private equity and an increasing allocation to unlisted infrastructure up until 2021. The increase in these allocations at that time was largely due to a sharp decrease in listed market valuations rather than an explicit increase in unlisted allocations. Superannuation fund liquidity management includes setting overall illiquidity limits and robust unlisted asset valuation processes in order to manage well through these types of stressed market environments.

More recently, allocations to private equity and property have declined, while infrastructure has stabilised at a higher level. This reflects the relative attractiveness of infrastructure in a world with structurally higher inflation (due to the underlying assets often inherent linkage to inflation), the challenges facing investment into private equity, and the maturity of the funds' unlisted property allocations (with historic biases to more challenged sectors such as office and retail). Despite recent commentary about the risks of private debt, the exposure to this asset class remains low.

Chart 1: Superannuation fund allocations to private markets over time



Source: APRA, Quarterly superannuation industry publications, December 2024

While super funds have been allocating to private debt for over a decade, allocations were only separated in the APRA data from 2020 (before this time they were under fixed income). Many Australian super funds have been investing in private debt since the late 1990's. For example, IFM Investors (or Industry Funds Management as it was then known) began managing private debt on behalf of its super fund owners / investors in 1999. The rise in these allocations was given additional impetus from the 2017 Superfunds Lending Roundtable, organised by the Australian Financial Review, where policymakers, superannuation fund leaders, and bankers were brought together to discuss and encourage increased direct lending from superannuation funds to local enterprises.

International comparators

While Australian superannuation funds have long experiences in investing in private markets and are leaders in relation to infrastructure in particular, the movement toward increased private market allocations is not limited to Australian asset owners. There has also been a global shift in pension investment strategy towards private markets.

The OECD has highlighted the growing interest of pension funds in infrastructure investments due to their long-term growth potential and low correlation with traditional asset classes. The OECD recognised the benefits of investment in private market assets in a [2009 report](), noting "infrastructure is made for the long term, and there seems to be a natural fit with the long-term liabilities of many pension plans." The majority of funds surveyed in the OECD 2011 report stated they are actively investing in infrastructure with percentage allocations up to 20% of their total portfolios.

According to the 2024 Schroders Global Investment Insights Survey, which interviewed 420 pension fund leaders from 26 regions worldwide representing $13.4 trillion in assets, over 94% of pension funds globally have already invested or plan to invest in private markets. Moreover, 27% of surveyed funds intend to increase their private market allocations within the next two years. This trend is particularly focused on specific private market segments. Pension funds globally show strong interest in private debt strategies (51%), private equity (49%), infrastructure debt (41%), and renewable infrastructure (38%). Thematic drivers are also emerging, with approximately 93% of funds already investing or planning to invest in energy transition opportunities, and over a third expecting to make new investments in this area within the next few years.

Pension funds and large institutional investors in other countries also have exposure to private market assets:

- The **United States** stands at the forefront of pension fund investment in some private markets, particularly private equity. Private equity has consistently remained a top investment choice for US public pension portfolios. U.S. public pension funds invest an average of 11% of their portfolios in private equity. U.S. endowments invest a significant portion of their funds in unlisted assets, such as private equity, venture capital, hedge funds, and real estate. On average, endowments allocate around 25% of their portfolios to a combination private equity/venture capital, real assets and private credit.

- **Canadian** pension funds have emerged as global pioneers in private market investments, developing a distinctive approach that has become known internationally as the "Canadian model." This approach, characterized by significant allocations to private assets, direct investment strategies, and sophisticated internal management capabilities, has positioned Canada's largest pension funds among the world's most influential institutional investors in private markets. Their success has attracted attention from pension systems around the globe seeking to emulate their strategies and results.

- **Dutch** pension funds also have a considerable exposure to private market assets. The ABP, the largest pension fund in the Netherlands, had about 15% of its investment portfolio in private equity and infrastructure at the end of 2020.

- Asset owners in **South Korea and Japan** have been gradually increasing their infrastructure investments over the past decade. Korea's National Pension Service (NPS) has allocated $31.2 billion to infrastructure, which is approximately a quarter of its alternatives portfolio and 4.2% of its total assets. This allocation has doubled since 2018. Similarly, Japan's Government Pension Investment Fund has made infrastructure the largest allocation within its alternatives portfolio, which also includes property and private equity. The fund plans to continue increasing its exposure and will start directly allocating to select partners.

- The **UK** government has been actively promoting increased investment in private assets, with the stated aim of using these investments to fuel economic growth. According to Treasury statements, action is being taken to "unleash the full investment might of the £360bn Local Government Pension Scheme to make it an engine for UK growth". This political impetus has manifested in specific allocation targets, with suggestions that LGPS funds should invest 10% of their portfolios in private equity. Chancellor Rachel Reeves stated in 2024 that "Australian pension schemes invest around 3 times more in infrastructure investment compared to Defined Contribution schemes in the UK and 10 times more in private equity, including in high growth businesses, compared to the UK".

- The **New Zealand** government announced changes in December 2024 to make it easier for KiwiSaver funds to be invested in unlisted assets, such as infrastructure projects. Commerce

Minister Andrew Bayly said that “Leveraging the money held in KiwiSaver to invest in unlisted assets, particularly domestic ones – such as transport projects, renewable energy generation or large-scale housing developments – would be a win-win. For unlisted Kiwi businesses, it means more capital to innovate and grow. For Kiwi investors, exposure to different asset classes means risk diversification and potentially higher returns”.

- The **Australian Future Fund** lists “we are a long-term investor” as one of their principal comparative advantages. This allows them to “buy and hold private or otherwise illiquid investments offering additional returns”. As at December 2024, 36% of their portfolio was investment in unlisted assets across equity, property, infrastructure and alternatives.

Section B – Benefits of unlisted assets

Benefits of unlisted assets

A key benefit of unlisted assets is that they diversify a portfolio that is made up mostly of traditional assets such as listed equities and bonds. This is because the performance of unlisted assets is often less correlated with the performance from equities and bonds and can represent different types of economic exposures and return sources. This means total portfolio (comprising exposure to a diverse set of asset classes) performance tends to be more stable when these assets are included.

Characteristics of unlisted asset classes

Unlisted asset classes provide the ability to target certain performance characteristics which are difficult to achieve otherwise. For example:

- Infrastructure is often targeted for its defensive and monopolistic characteristics, which is to say it tends to have relatively stable, income-driven returns and tends not to have large periods of negative returns
- Private equity provides access to companies not accessible on listed markets, including at earlier stages (e.g. venture capital), where capital gains potential is higher. Private equity can provide variable returns but expected returns are generally higher than listed equity markets.
- Private credit has generally provided higher income with limited sensitivity to interest rate changes (due to floating rate nature of loans) relative to fixed-rate, liquid credit investments
- Property assets vary based on the exact sector exposures but typically have less risk and exhibit greater stability in returns relative to those from listed equities, due to contracted income streams.

Underlying private market assets are typically heterogenous, requiring significant hands-on management and an understanding of the regulatory environment and technological landscape to create value after acquisition. Strong performance can be generated by the investor that has the skills to create this value. Funds also can earn a higher return (illiquidity premium) for owning an illiquid asset.

The objectives of superannuation funds are typically linked to inflation, ensuring that the real value of members benefits is protected. Some unlisted assets, like real estate and infrastructure, can provide a hedge against inflation, which is beneficial for long-term investors like superannuation fund members.

In addition, certain types of unlisted assets, such as infrastructure and real estate, can generate stable cash flows, which can be attractive for superannuation funds that need to make regular payouts to their members.

Performance

Performance of the private markets sectors over the long term has typically been strong. As expected, Australian private equity and venture capital (Table 2) have performed much more strongly over the long term than listed equities given the higher risk and illiquidity of private equity.

Table 2: Performance to 30 September 2024 (% p.a.)

Asset class	5 years	10 years	15 years
Australian listed equity	8.3	8.9	8.1
International listed equity	12.1	12.5	12.0
Private equity (Internal Rate of Return)	14.7	13.9	14.4

Source: LSEG Datastream, MSCI. Before tax and fees

When looking at Table 3, infrastructure has also been a very strong performer over the long-term, which is notable given it also provides reasonably stable returns. Real estate has not performed as strongly, but returns have still been attractive, noting that these assets are also defensive in nature. Notwithstanding this, returns over different periods are sensitive to the start and end dates.

Table 3: Performance to 31 December 2024 (% p.a.)

Asset class	5 years	10 years	15 years
Global listed property	-1.4	2.7	6.5
Unlisted property	1.9	5.0	7.0
Global Listed infrastructure	3.8	7.0	10.3
Unlisted infrastructure	6.5	8.7	9.5

Source: LSEG Datastream, MSCI. Before tax and fees

Academic research

A 2023 paper in the Journal of Asset Management, *Pension fund investments in infrastructure,* noted that over the last three decades, institutional investors have increased their exposure to alternative assets, and infrastructure allocations have increased in particular.

When looking at the performance of infrastructure over time, they find that, similar to other asset classes, the financial returns of infrastructure investments experienced a weaker outcome during the Global Financial Crisis, after which returns bounced back. Over the 2007–2018 time period, infrastructure has been one of the best-performing asset classes, exhibiting the second-highest net returns (after private equity).

Table 4: Asset class performance (% p.a.)

Asset Class	2007 – 2012		2013 – 2018		2007 – 2018	
	Return	Risk	Return	Risk	Return	Risk
All Assets	6.7	17.0	7.2	11.1	7.0	13.7
Stocks	6.2	22.2	9.5	13.7	8.1	17.8
Bonds	8.0	7.9	3.0	7.1	5.0	7.8
Infrastructure	6.3	7.9	11.5	8.3	10.1	8.4
Real Estate	4.1	16.9	9.8	5.6	7.7	11.5
Private Equity	9.7	13.4	14.4	6.7	12.6	10.1
Hedge Funds	4.1	11.3	4.2	7.2	4.2	8.8

Source: Pension fund investments in infrastructure, Journal of Asset Management

Based on the data presented in their paper, the authors note an increase in infrastructure allocations seems to be justified from a risk/return perspective, and pension funds with no infrastructure exposure should consider investing in this alternative asset class.

A paper in the Journal of Financial Economics, *The illiquidity premium: International evidence* (2013) found the average illiquidity return premium across countries is positive and significant, after controlling for other pricing factors.

This study provided comprehensive evidence that stock illiquidity is priced in the great majority of international equity markets. The portfolio of the most illiquid stocks generates significantly higher risk-adjusted return than the portfolio of the most liquid stocks. The differential risk-adjusted monthly return on illiquid stocks was 0.82% for return-weighted portfolios, after controlling for the six global and regional common risk factors (the market, size, and value factors).

APRA research

The APRA Working Paper *Risk and return of illiquid investments: A trade-off for superannuation funds offering transferable accounts (2011)*, examined investments in illiquid assets and the subsequent impact on portfolio performance. Illiquid assets include directly held property, unlisted property trusts, infrastructure investments, private equity and hedge funds.

The paper noted that most superannuation fund assets are liquid, which means they are able to be converted into cash within a few days and are able to be valued using market prices. However, many superannuation funds have increased their allocations to illiquid assets, in the expectation that these assets would yield sufficiently large returns to compensate for their illiquidity. Illiquid assets may provide diversification benefits and an opportunity for some funds to leverage off their existing investment expertise.

Certain superannuation fund characteristics may lend themselves to larger allocations to illiquid assets. The paper finds that profit-to-member funds which are typically larger, have greater net cash inflows and have younger members — all factors which tend to reduce liquidity needs — allocate a greater proportion of their portfolios to illiquid assets.

The key findings of the research, which we believe still hold today are:

- profit-to-member funds (corporate, industry and public sector funds) have a higher illiquid asset allocation on average, although there is a wide range in allocations among both retail and profit-to-member funds;
- profit-to-member funds that allocate a greater proportion of their portfolios to illiquid assets are generally larger, have higher net cash inflows and have younger members — all factors which tend to reduce liquidity needs;
- from September 2004 to June 2010, profit-to-member funds with more illiquid investments experienced higher risk-adjusted returns, which suggests they captured a return premium for investing in these assets; and
- it corroborates evidence from previous studies that holdings of illiquid investments can benefit superannuation funds by improving diversification and increasing risk-adjusted returns.

We believe the higher allocation to illiquid assets by profit-to-member funds stems from a deliberate and strategic approach from trustees to devise and operate institutional rather than retail investment approaches (to fully capitalise on system characteristics and member demographics).

Section C – Liquidity management

Liquidity management

The management of liquidity is essential for superannuation funds invested in unlisted assets to ensure they have sufficient liquidity buffers for exceptional circumstances. If liquidity is not managed well, funds may have to sell assets quickly, potentially for a value less than expected.

Liquidity management ensures funds can meet their liquidity requirements, including ensuring beneficiaries can redeem investments, when required, in a range of market conditions.

If liquidity stress arises to the extent that it cannot be met by a super fund's existing resources, it can also – as a last resort – refuse to honour member requests to switch investment allocations or (with APRA approval) member redemptions.

Prudential requirements

APRA Prudential Standard SPS 530 on Investment Governance outlines key requirements for the management of investments by superannuation funds, with a strong emphasis on liquidity management. SPS 530 requires superannuation fund trustees to establish an appropriate investment governance framework. This includes formulating an investment strategy that addresses various risks, including liquidity risk.

Trustees are mandated to develop, maintain, and implement a liquidity management plan as part of their investment strategy. This plan should cater to the fund's ability to meet both expected and unexpected cash flow requirements without impacting investment returns.

APRA expects funds would demonstrate an understanding of the key sources of liquidity, the certainty as to its availability and reliability and the potential for these sources to deteriorate. Funds need to demonstrate adequate liquidity management practices commensurate with the nature, risk and complexity of investments and business operations.

Trustees need to demonstrate how their liquidity risk tolerances are informed by characteristics of the fund and its investment options through consideration of benefit design, member demographics, the range of investment options offered and the level of transactional activity.

Liquidity management in SPS 530 also includes requirements for asset valuation governance and stress testing. Trustees must ensure the accurate valuation of assets and conduct stress tests to assess the impact of various scenarios on their liquidity position.

Overall, SPS 530 sets a robust framework for liquidity management, ensuring that superannuation funds are well-prepared to handle cash flow requirements and risks, thereby protecting members' interests and promoting financial stability.

Liquidity management plan

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.

As set out in SPG 530, a Registrable Superannuation Entity (RSE) licensee must, at a minimum, have a liquidity management plan, approved by the Board, for each RSE within its business operations that:

- covers each investment option in the RSE;
- outlines the procedures determined by the RSE licensee for measuring and managing liquidity on an ongoing basis;

- includes consideration of how the liquidity of investment options in an RSE can be managed in a range of stress scenarios;
- identifies the circumstances the RSE licensee considers to be a significantly adverse liquidity outcome that requires action (liquidity event);
- outlines what action the RSE licensee will take when a liquidity event occurs;
- outlines the roles and responsibilities of persons involved in the management and oversight of liquidity risk, including the role of the Board, relevant Board committees and senior management; and
- outlines information, including key metrics, that must be reported to the Board, relevant Board committees and senior management, to ensure adequate oversight of liquidity risk

Frontier views liquidity management as a key priority for managing investment portfolios and has been a key focus of superannuation funds for more than a decade. The checklist below provides a number of practical steps to ensure asset owners remain on top of this issue particularly during stressed market periods:

- Stress test and plan for foreign exchange (FX) hedge rolls and other derivative margin calls
- Ensure cash portfolios remain highly liquid by limiting term deposit exposure and other strategic cash holdings
- Identify priority liquidity sources
- Keep up to date with changes to manager liquidity processes along with buy/sell spread updates
- Consider transaction costs and tax liabilities associated with selling assets to provide liquidity
- Keep abreast of manager plans for calling any outstanding commitments to unlisted assets
- Maintain robust valuation processes for unlisted asset exposures with an aim to minimise potential member inequality outcomes
- Keep up to date with managers of products that are hedged into A$ especially those whose assets are illiquid or less liquid
- Check reinvestment plans on pooled investments (turn off all Dividend Reinvestment Plans (DRPs) for unlisted assets)
- Keep up to date on future cash demands. For superannuation funds, this includes member activity such as switching, member outflows and stresses on inflows

  Being mindful of physical cash in addition to effective/net cash ranges with an appropriate minimum of physical cash.
- Be mindful of asset allocation impacts on MySuper and other options that are impacted by deviations from Strategic Asset Allocations (SAA).

Day-to-day liquidity management

Funds will continually monitor and manage their regular cash flow needs. Superannuation fund cash flows are relatively stable and predictable:

- Income is substantially made up of Superannuation Guarantee Charge contributions and income (such as dividends, interest coupons and rent) from investments

- Outgoings include benefit payments and expenses
- Rollovers into and out of the fund are less predictable and can either contribute positively or negatively to income
- Members switching between options, whilst not a net cashflow and not usually exercised by the majority of members, can also impact upon liquidity needs.

The cash flow position of a fund will be a determinant of its allocation to illiquid assets. Cashflow positive funds have greater ability to manage liquidity risk and therefore can invest a higher proportion of assets in private markets.

Stress event liquidity management

Liquidity risk is perhaps the most critical aspect of managing portfolios though stressed market environments. Ensuring an adequate liquidity “buffer” in fast changing environments is a key issue for superannuation funds.

As part of the annual strategy reviews we undertake for our superannuation fund clients, Frontier conducts liquidity analysis of a fund’s MySuper option together with other Member Investment Choice (MIC) options. Our liquidity modelling is undertaken under a range of assumptions, tailored to each superannuation fund’s particular circumstances.

Liquidity stress testing should consider:

Supply-side factors

- A number of historical market stresses and model the outcomes of the current strategy under these circumstances.
- Market liquidity within asset classes, even in normally very liquid asset classes, has manifested in investment managers increasing sell spreads during stressed periods on many investment products across bonds, equities, credit and alternatives. Any forced selling of these asset classes to meet fund liquidity demands often results in greater costs for investors
- The need to test liquidity within asset classes on a bottom-up basis, particularly where portfolios have substantial exposure to smaller capitalisation stocks within equity portfolios and alternative debt within fixed income
- Funds hedging currency through forwards have had to ensure enough liquidity to meet contract losses (margin calls) when the Australian dollar falls (which has typically occurred during risk-off periods).

Demand-side factors

- Current cash flow. Funds with negative cash flows are more vulnerable to liquidity issues
- Scheme demographics. Older membership can impact cash flow as members may be able to retire and withdraw their funds. Similarly, funds with high levels of casual workers may see inflows fall in recessions when markets are also in decline.
- Member switching. While most members can’t access their superannuation funds, they can switch between options or move to another fund. Market stress events often see an increase of members moving from the default option to cash or lower risk options. As these options typically have lower exposure to illiquid assets, this effects the overall fund liquidity position.
- Option rebalancing. In normal market periods, funds will typically rebalance their portfolios back to their targeted asset allocation. During a stress event, such rebalancing can be difficult, particularly if it requires a sell down of illiquid assets.

- Funds have needed to allow for the potential that illiquid investments draw down on commitments to help them with capital requirements or for investment purposes
- Having liquidity in reserve to be able to take advantage of investment opportunities that may arise through stressed periods
- The modelling includes adjustments for the announced policy change in 2020 allowing temporary early access to superannuation for members that are experiencing unemployment or reduced employment due to COVID-19.

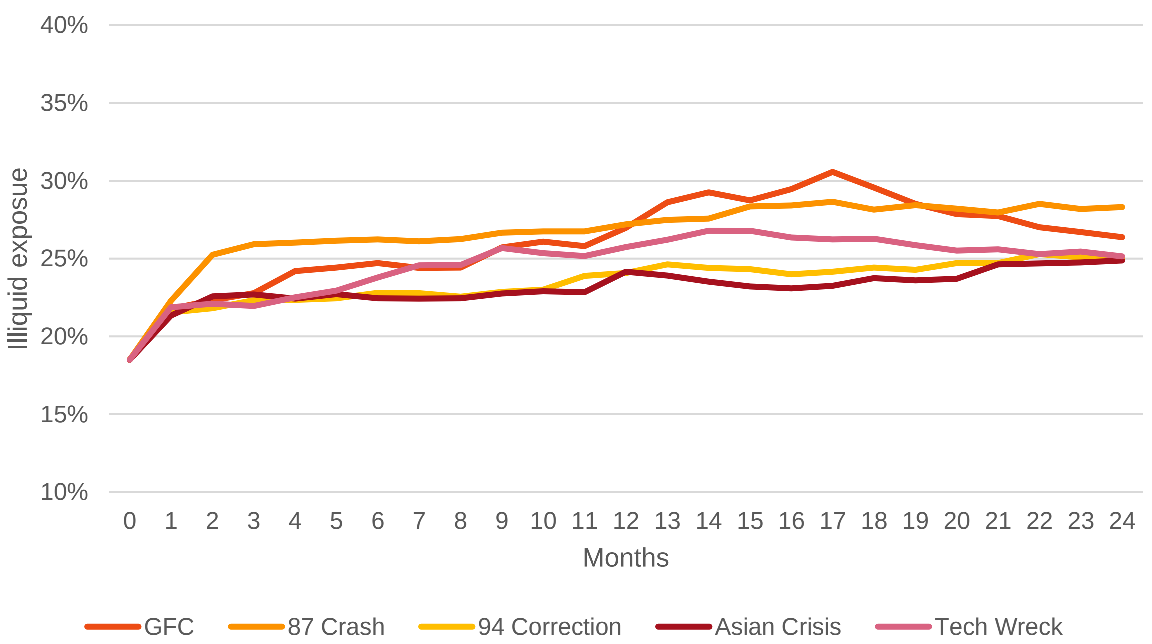
The need to stress test liquidity on a top-down basis which combine both market and liquidity stress, in accordance with each fund's liquidity policy.

Example analysis

The example below models the liquidity position of a hypothetical fund during various stress market events. The fund has an exposure to illiquid assets of 18.5% before the stress market (i.e. at month 0). The illiquid exposure is then mapped through various historical market periods – the GFC, the 1987 crash, 1994 correction, the 1997 Asian market crisis and the 2000 tech wreck.

The exposure to illiquid assets increases during market crisis considering the supply and demand factors mentioned above. In addition, listed markets typically decline quicker than unlisted markets, resulting in the percentage allocation to unlisted assets increasing.

Chart 2: Illiquid exposure



When modelling the GFC market crisis scenario, the illiquid exposure of the MySuper portfolio starts at 18.5% and peaks 18 months later at 30%. After two years, the illiquid exposure has started decreasing to around 25% of assets.

The 1987 crash scenario exhibited a more pronounced short-term effect, with the illiquid exposure increasing to over 25% in just two months as listed markets crashed. However, the illiquid exposure would be slightly lower than that modelled under the GFC scenario, peaking under 30%.

The other market scenarios follow a similar, but lower, path. The illiquid exposure peaks about 12 months after the initial market crash in each case, increasing to around 25%, and then stabilising.

COVID stress event

The financial impacts of COVID-19 provided a real-life stress scenario and was a significant test of super funds' liquidity management. During 2020, the superannuation industry faced significant liquidity management challenges due to a number of factors that arose simultaneously:

- a decline in equity markets in March and April 2020, which resulted in unlisted assets (which didn't decline immediately) making up a higher proportion of investments;
- conditions in non-government bond markets deteriorated in mid-March 2020 as investors reassessed credit risks, and corporate and bank debt spreads widened. Market liquidity diminished, as bond dealers became constrained in their ability to undertake more trades;
- increased propensity of members to switch out of riskier (and so generally less liquid) investment options (e.g. High Growth) and into cash or options with high cash and low unlisted allocations;
- funds' increased need for liquid assets to meet margin calls on hedges (held to reduce foreign currency risks); and
- an unprecedented temporary relaxation of the system's preservation rules due to the Federal Government's Early Release Scheme (ERS), which enabled members to withdraw up to $20,000 (in two tranches) from their superannuation balance if they had been adversely impacted by the pandemic. This resulted in $37 billion of ERS withdrawals, equivalent to 2 per cent of superannuation assets as at December 2019.

In response, super funds substantially increased their liquidity – aggregate cash balances increased by $51 billion over just the March quarter of 2020. A portion of this was subsequently unwound as funds made ERS payments. 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.

Despite this confluence of events, superannuation fund liquidity management practices proved to be effective in navigating through these challenging times. The RBA Financial Stability Review of April 2021 found that events during 2020 showcased that funds manage liquidity well but can improve some aspects.

One reason funds successfully navigated the period was robust liquidity management practices and prudential oversight meant that the industry was well placed to accommodate this liquidity episode. 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.

However, the RBA found that the early release scheme added to liquidity challenges. A number of large funds paid out more than 5 per cent of FUM under the ERS. 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.

The RBA Financial Stability Review of April 2024 found that early release of superannuation during stress events increases liquidity calls. This limits funds' ability to stabilise the economy through counter-cyclical investment and recapitalisation of banks and businesses, a role they played during the GFC.

The RBA in a March 2025 panel discussion also observed such systemic risks emerged not from the characteristics or scale of the funds themselves but from the policy settings changing. They have commented that "historically, and even just at a conceptual level, our super fund industry should be good for financial stability".

Change to preservation rules

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.

The current preservation rules allow super funds to invest as long-term investors, taking a patient approach to investing. The preservation rules give funds the flexibility to invest in unlisted assets, an option not available to short-term investors where more immediate liquidity is required.

The changes to the preservation rules during COVID added an unexpected challenge to the liquidity situation faced by superannuation funds. With the ERS withdrawal and markets rebounding since 2020, funds have typically not changed their liquidity exposures. However, if preservation rules were relaxed on a more permanent basis, funds would need to reassess their structural illiquidity exposure.

In particular, funds may need to hold a higher proportion of their assets in cash to avoid having to continually sell assets to fund withdrawals. Selling assets, even liquid ones, involves transaction costs and tax liabilities, which decreases long term returns for all members.

A sustained policy change would establish a new business-as-usual environment for funds, requiring them to reassess their liquidity management of portfolios, including their liquidity buffers during stress events. This could exacerbate the impact of future stress events on members by:

- Reducing funds' ability to take advantage of investment opportunities during downturns, as they would need to use available cash to fulfill redemptions and maintain higher buffers due to more volatile withdrawal behaviour.
- Increasing the likelihood of liquidating assets when values are low, resulting in crystallized losses or not realizing full sale potential, and transaction costs and tax liabilities.
- Diminishing funds' historical role as counter-cyclical investors, leading to more pro-cyclical behaviour and increased economic and financial system risk. Counter-cyclical investing has benefited the economy by injecting liquidity into the market during downturns, buying when others are selling, and recapitalising Australian businesses, including banks.

Section D – Super for housing

Super early release for housing

Proposals regarding the use of superannuation for housing focuses on enabling more Australians, particularly first-time homebuyers, to access their superannuation savings for housing purposes. Here are some of the proposals:

- Super Home Buyer Scheme: This scheme would allow first homebuyers to withdraw up to 40% of their superannuation savings, capped at a maximum of $50,000, to use as a deposit for purchasing a home. The intention behind this proposal is to make it easier for individuals to enter the housing market by reducing the financial barrier of a deposit.
- Offset Home Loans: Another proposal involves using superannuation to offset home loans. This idea is intended to lower loan balances and reduce interest costs for homeowners, thereby making housing more affordable over time.
- Using super as collateral: This proposes that first home buyers be allowed to use their super balance as collateral for a first home loan. The objective of this idea is to reduce the deposit needed to buy a first home.
- Repayment and Preservation: Any funds withdrawn under these proposals would need to be repaid into the superannuation account once the property is sold. This is designed to safeguard individuals' retirement savings while still offering an option to support homeownership.

These proposals reflect an ongoing debate about balancing immediate housing needs with long-term retirement savings, considering the rising challenges of housing affordability in Australia.

Implications for superannuation asset allocations

Potential changes to superannuation preservation policy likely mean a further demand on fund liquidity. Policy impacts are particularly meaningful for funds with smaller balance members in industries that will be highly impacted by the policy (e.g. COVID early release, super for housing, etc.).

Changes to preservation rules would have impacts on the liquidity management for superannuation funds. The increased liquidity requirements which would result in funds needing to reassess their capacity to maintain the current exposure to unlisted assets, including:

- holding more operating cash to provide short term liquidity
- decreasing long-term exposure to illiquid assets.

Changes to preservation rules would add an additional constraint to funds’ investment strategies and would decrease their ability to act as long-term investors. A reduction in unlisted asset exposures would curtail the retirement benefits of superannuation members. Long term returns from superannuation funds would be expected to decline if funds moved from unlisted assets to comparable listed assets.

Comparative superannuation returns

A small number of funds offer their members both a MySuper option which has exposure to unlisted assets together with an option which doesn’t have exposure to unlisted assets (typically listed asset class ‘indexed’ options). The comparison of the performance of these options provides a view on the effect on returns if funds were no longer able to invest in unlisted assets.

Table 5: Ten year performance to 31 December 2024 (% p.a.)

Fund	Return	Risk	Sharpe Ratio*
Fund A - MySuper	8.1	6.6	1.0
Fund A – Indexed	7.5	7.4	0.8
Fund B – MySuper	8.4	6.3	1.1
Fund B – Indexed	7.8	8.4	0.7
Fund C – MySuper	7.2	6.6	0.8
Fund C – Indexed	6.6	7.8	0.6
Fund D – MySuper	7.1	5.9	0.9
Fund D – Indexed	7.3	8.4	0.7

* The Sharpe ratio measures performance relative to risk (as measured by standard deviation of return). The higher the ratio the better performance is for the amount of risk taken.
Source: SuperRatings

The data in table 5 highlights that each respective option with exposure to unlisted assets has outperformed the option which doesn't have exposure over the longer term:

- for each of the Funds A, B and C the flagship MySuper options have outperformed by +0.6% p.a. over ten years. That said, the Fund D MySuper fund underperformed by 0.2%
- the MySuper funds achieved this performance at a much lower risk level (as measured by standard deviation of returns) for all funds
- this resulted in a significantly higher return/risk outcome (as measured by the Sharpe ratio) for each of the MySuper funds.

MySuper members have achieved better outcomes over the long term in these funds as a result of the exposure to unlisted assets. They have achieved higher returns (after fees) at a lower risk than they would have if they had invested in a comparable option without exposure to unlisted assets.

KiwiSaver experience

New Zealand has had nearly two decades of lived experience with a scheme conceptually similar to that proposed in Australia. New Zealanders who have been KiwiSaver members for at least three years are permitted to withdraw their savings to purchase a first home, subject to maintaining a minimum balance of NZ$1,000.

Since the beginning of the 2011-12 financial year, around 379,000 New Zealanders have withdrawn a total of just over NZ$9.7 billion from their KiwiSaver accounts towards the purchase of first homes.

The New Zealand experience also shows the likely impact on Australians' retirement savings if such a policy were implemented here. First, from lower retirement balances for those individuals whose accumulated retirement savings are withdrawn early, but also for all participants due to the lower returns stemming from higher liquidity requirements for portfolios. These flow-on effects will ultimately contribute to a greater burden on Government pension schemes, in turn putting a greater cost of retirement on to taxpayers.

Table 6: Returns for Australian MySuper and NZ Kiwisaver balanced options (% p.a.)

Period to December 2024	MySuper	KiwiSaver	Difference
3 years	5.1	3.4	+1.7
5 years	6.7	5.4	+1.3
10 years	7.7	6.6	+1.1
Growth assets (%)	70%	58%	+12%

Source: SuperRatings, Morningstar. Asset weighted average returns after fees and taxes.

As of December 2024, Australian MySuper products (balanced options) had outperformed comparable KiwiSaver investment options by an average of 1.1% every year for the past decade. Due to liquidity requirements, KiwiSaver had substantially lower exposure to growth and unlisted assets over that period.

Expected returns

Frontier produces several sets of capital market return assumptions to reflect different timeframes and methodologies. The 'Equilibrium' assumptions are to be regarded as long term 'equilibrium' return assumptions, under 'normal' conditions. They are intended to not be overly influenced by the current market environment and are independent of current asset class valuations.

Historical data is reviewed to provide a starting point. This helps to identify trends and determine the relativities between asset classes over time and during different phases of the economic cycle. We then consider the fundamental drivers of investment markets (including inflation and long term real and nominal growth expectations) and consider secular themes that can impact long-term investment outcomes, including climate change, productivity and technology, inequality and demographics. Major changes to the equilibrium assumptions are therefore infrequent.

The table below shows Frontier's long term expected return (pre-tax) and risk for listed and unlisted assets classes.

Table 7: Long term expected capital market assumptions

Asset class	Return (% p.a.)	Risk (% p.a.)
Australian listed equity	8.0	17.0
International listed equity	8.0	14.0
Private equity	11.0	20.0
Global listed property	7.5	13.5
Unlisted property	8.0	8.0
Global Listed infrastructure	7.5	13.5
Unlisted infrastructure	9.0	10.0
Australian bonds	5.2	3.4
International bonds	5.4	3.4

Asset class	Return (% p.a.)	Risk (% p.a.)
Private debt	8.0	6.0

Source: Frontier

The assumed premia for the unlisted asset class over the listed asset class ranges from 3% p.a. for equities to 0.5% p.a. property. We assume that both unlisted property and infrastructure are lower risk than the comparable listed assets class due to differing market constituents. However, for both private equity and debt, we assume the unlisted version is typically riskier. We note that many super funds are participating in senior secured bank loans alongside Australian banks and have strong credit processes and teams in place, so this assumption is a conservative approach. Our unlisted asset class risk assumptions are adjusted upwards given these are not daily traded assets, causing volatility data to be dampened.

Based on these assumptions, we expect a typical balanced MySuper option with exposure to unlisted assets would outperform a similar MySuper option with no unlisted assets by around 0.4% p.a.

Impact on member outcomes

Superannuation fund member outcomes have benefited from exposure to unlisted assets from both a return and diversification perspective. We expect unlisted assets will continue to benefit members retirement outcomes in the future if super funds can continue to invest in these assets in a meaningful way.

If the current preservation rules are relaxed such that super funds could no longer act as long-term investors, member outcomes could be negatively impacted. In the extreme, if funds were no longer able to invest in unlisted assets, we expect returns to be lower by 0.3 – 0.6% p.a.

Even small decreases in returns can have large impacts on member outcomes when compounded over a working lifetime. Table 8 shows the effect of a reduction in return could have over a forty year period of a member’s working live. If the reduction was extended into the retirement phase, the impact would be significantly greater.

Table 8: Impact of return reduction

Return reduction	Reduction in balance	Reduction in real balance
0.3% p.a.	-8.8%	-$152,600
0.4% p.a.	-11.5%	-$200,200
0.5% p.a.	-14.1%	-$246,200
0.6% p.a.	-16.7%	-$290,800

Source: Frontier

Appendix – Private market assets

Below we describe both what each of the asset classes within private markets are, as well as what characteristics they share. The one common factor between all 'private market' asset classes is that these comprise investments that are not publicly traded and are often considered 'illiquid'.

What are unlisted asset classes?

Private equity

The simplest definition of the private equity asset class is an equity investment in private traded companies (i.e., not publicly traded) to improve performance, increase company value and generate profitable returns for investors. In practice, private equity investing tends to focus on specific strategies (leveraged buy outs, growth, turn-around or venture capital). For example, buyouts are applicable for large companies that may be profitable but have the potential to become more valuable by accessing growth opportunities, better management, mergers and acquisitions, or better corporate structuring.

Unlisted infrastructure

Infrastructure assets can be diverse depending on the subsector but tend to share a set of similar characteristics. Infrastructure assets are often physically large, capital intensive and often monopolistic. In Australia, common examples include toll roads, seaports, airports, electricity networks, renewable energy, digital and water assets. There are also smaller assets that fall into the social infrastructure class, such as schools and prisons. All these assets are expected to have relatively consistent and long-term cash flows, driven by regulation, long-term contracts, inelastic demand or monopolistic positioning.

Unlisted property

The core real estate asset class typically comprises established office, retail, or industrial properties. The key drivers for these assets are leasing/re-leasing space, length of lease contracts, contracted lease rate escalations, and capital expenditures. Riskier approaches to investing in real estate may involve repositioning assets or building new assets (called greenfield investing as opposed to brownfield, which refers to existing assets). Other subsectors within real estate include self-storage, healthcare, life sciences, cold-storage, hotels, and affordable housing. In Australia, institutional investors do not typically invest in residential property, although super funds are exploring a variety of innovative models which add to housing supply (greenfield developments), such as via the Housing Australia Future Fund, build-to-rent, and build-to-rent-to-buy projects.

Private debt

Private debt represents a broad, diverse and often complex opportunity set that offers a growth return profile less correlated to equity and with lower volatility than equity. There is a wide range of strategies available to meet the varying needs and requirements of investors. These include senior direct lending, subordinated debt, private asset-based lending, opportunistic credit and distressed credit. Typically, private debt involves providing loans to companies, giving investors access to investments with low duration or floating rate profile less impacted by rising interest rates. They are higher yielding assets providing regular income in some cases.

About Frontier Advisors

Frontier Advisors is one of Australia's largest asset consulting firms. Established in 1994, the firm specialises in providing strategic investment advice to institutional investors, including superannuation funds, government entities, and other large organisations. The firm advises on more than A$800 billion in funds under management with clients in all states and territories of Australia, New Zealand, the Pacific and with an office in Japan.

Frontier Advisors is known for its independent approach, avoiding potential conflicts of interest by not offering multi-manager investment products but rather focussing on a pure advice-only approach. The firm is owned by AustralianSuper, Cbus Super, Hesta and First Super, which helps maintain its focus on delivering unconflicted advice.

The firm has a strong reputation for its expertise across a wide range of areas and its client-centric approach. Many of Australia's largest superannuation funds and their members have benefitted from Frontier's advice over the last three decades, in particular assisting many to develop and manage exposure of unlisted assets, an area where Frontier continues to maintain a strong position in its capability in the investment advisory space.

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