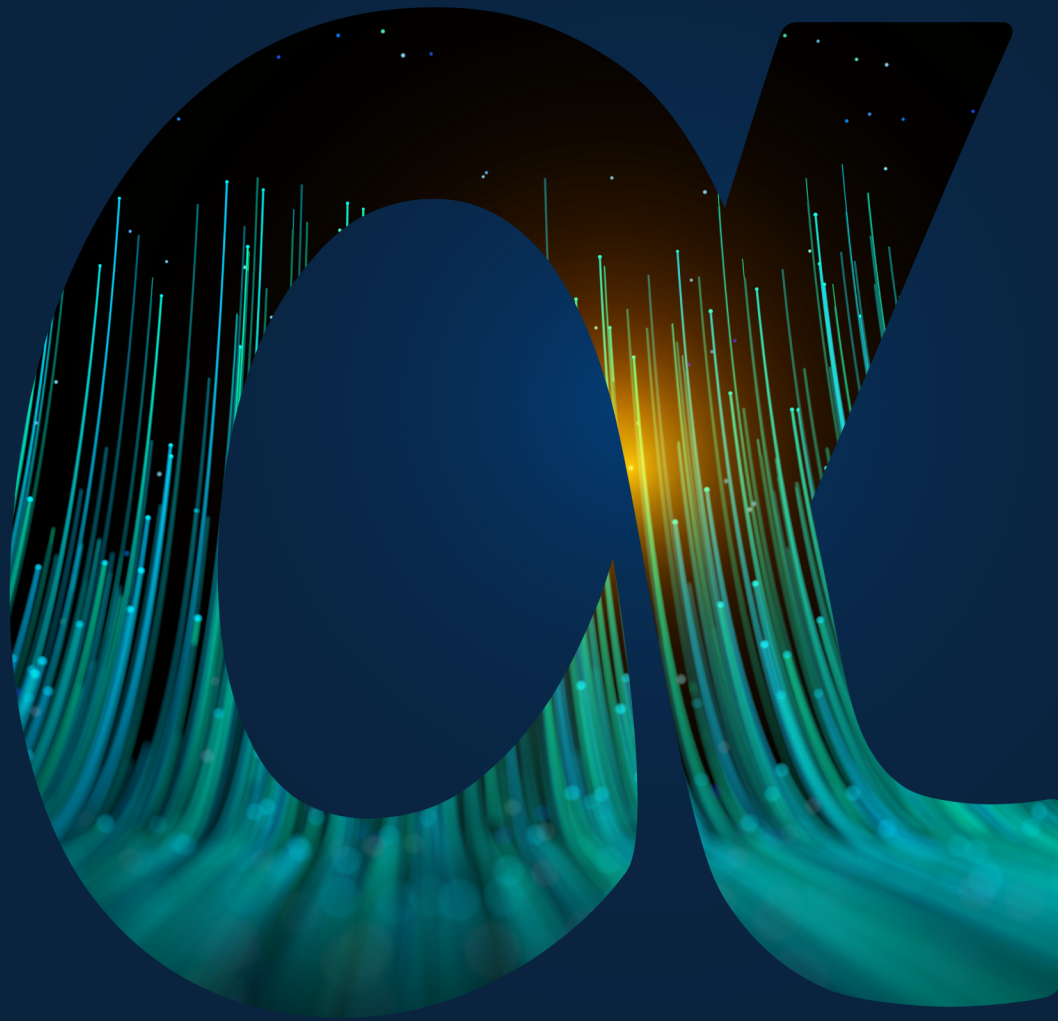


State Street AlphaSM

Private Markets: A Silent Revolution

State Street Alpha Private Markets Survey Report



Executive summary

- Asset owners and managers expect demand for private markets investments to rise in the next three to five years, according to State Street and Mercatus' survey of 85 managers and 85 asset owners. The average allocation to asset classes such as private equity, private debt, infrastructure and real estate is expected to increase from 22 percent to 28 percent in that timeframe, while asset managers predict that their private markets allocations will rise from 30 percent on average to 35 percent.
- Data quality and standardization is a key barrier to increasing private markets allocations. Asset owners want greater use of technology to improve the quality and the timeliness of information from their asset managers, and they increasingly want an accurate top-down portfolio view across all asset classes. They also want greater transparency of holdings and fees.
- Institutional investors want their managers to upgrade their technology and back-office systems to improve service provision and broaden the private markets opportunity set. Poor data limits investors' ability to run forward-looking scenario analyses or conduct stress tests on their investment portfolios.
- Many asset managers rely on siloed data management processes based on spreadsheets, and on manual inputs and analysis. These factors slow down the speed at which information is processed and can increase the risk of human error. In addition, they can limit managers' ability to scale up as demand for private market assets increases.
- The cost of upgrading data management technology is seen as prohibitive by many managers. They also lack knowledge of options to their current arrangements and are wary of the potential need to train existing staff or hire new employees.
- Better data is especially important when considering environmental, social and governance (ESG) factors. Asset owners and managers agree that poor data can hinder efforts in this area, as demand rises for private market assets that make a positive and measurable contribution to ESG-related causes.

Introduction

Private markets assets are set to build on a strong pattern of growth as investors seek to diversify their portfolios and hunt for better returns than those expected in public markets.

At the end of March 2021, assets under management in the private equity space alone reached an estimated US\$4.1 trillion, according to Preqin, with that figure expected to more than double to US\$9.1 trillion by 2025.^{1,2}

The smaller subclasses of private markets such as private credit are also primed for significant growth, putting the combined sector on course to capture a larger share of professionally managed assets.

Traditional and alternative managers alike recognize this shift and are struggling to ride the wave of capital. The recent flurry of deal activity between managers, such as Vanguard's partnership with HarbourVest, demonstrates how critical private markets investing is to their growth prospects. Few traditional managers can expect to thrive without a competitive private offering as the commoditization of investing continues.

Strong asset growth has coincided with diversification in the types of clients that asset managers serve. Apart from institutional clients such as defined benefit pension funds

and sovereign wealth funds, managers also expect wealth managers, endowments and foundations, retail investors, and defined contribution pension funds to become more important distribution channels.

State Street and Mercatus surveyed 85 asset managers and 85 asset owners in August and September 2021 to understand the drivers of demand for private markets investments and explore how managers and owners are dealing with the private markets data challenge.

A crucial factor in the changing nature of private markets investing revolves around data. Managers need to become more effective and efficient at managing, analyzing, and reporting on the vast quantities of complex data related to existing and prospective investments.

Improvements in these areas could be a significant driver of alpha, but more pressingly, asset owners are demanding it. They need greater transparency on holdings, investment process, costs and sustainability criteria, placing tremendous strain on the existing reporting capabilities of many asset managers.

¹ Preqin Quarterly Update: Private Equity Q3 2021 Tearsheet, 11 October 2021.
<https://www.preqin.com/insights/research/quarterly-tearsheets/preqin-quarterly-update-private-equity-q3-2021-tearsheet>

² Preqin, Future of Alternatives 2025, November 2020.
<https://www.preqin.com/insights/research/blogs/private-equity-aum-will-top-9tn-in-2025>

These demands reflect an increasing sophistication of institutional investors, who can now do much more with their own analytics and modeling as technologies and tools have proliferated. Thus, greater levels of detail are needed for them to scrutinize and feed into their systems. They have become accustomed to the high bar of service that public markets have set in terms of data quality and accessibility.

Furthermore, regulators now demand greater accountability for all stewards of capital. Major pension funds are coming under more scrutiny from regulators and investors to manage costs and take sustainability concerns into account – and both issues require greater transparency and reporting from their asset managers.

These kinds of data are often not readily available to investors, so they must be requested. Only 15 percent of managers told us they provided direct data feeds to clients, for example. Even when data is made available, it is typically not in a format that allows for seamless integration into investors' systems and processes. Data is often siloed and not standardized, requiring manual intervention, which makes producing a unified, overall view of private market portfolios difficult, and a public-private portfolio view near impossible.

Managers' technology and processes for handling and reporting data must be modernized to meet the needs of their investors and the demands of the business as it scales up. While this is no straightforward task, the business-critical nature of the issues means that they can no longer be delayed.

Data is often siloed and not standardized, requiring manual intervention, which makes producing a unified, overall view of private market portfolios difficult, and a public-private portfolio view near impossible.

Current allocations across regions and sectors

The global financial crisis of 2007-2009 fundamentally reshaped funding sources for many private market asset classes.

As investment banks withdrew from riskier forms of lending, asset managers stepped in to fill the demand. More than a decade later, areas such as private equity, private debt and infrastructure are still drawing a huge amount of interest from investors.

Private equity is the largest subset of the private markets universe by assets.³ However, our sample of asset managers showed a slant towards private debt, which has drawn a significant level of interest from investors in the past 10 years.

North American asset managers have been particular beneficiaries of this trend, our data indicate: on average, managers in our survey hold US\$17.9 billion in private debt compared to US\$9.7 billion for managers based in Europe.

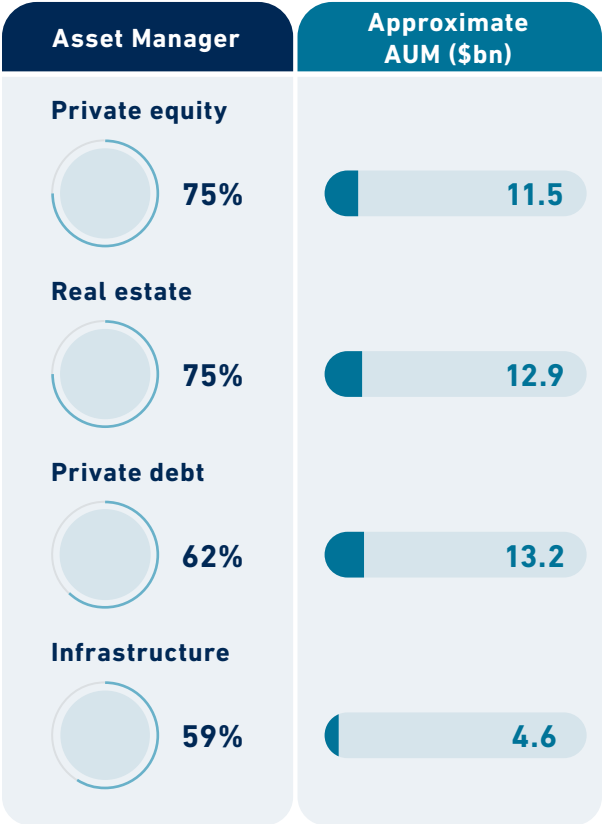
The allocation story among asset owners is more nuanced. Of those we surveyed, the average allocation to private equity is 8.5 percent, ahead of real estate (7.2 percent) and private debt (4.3 percent).

In terms of future allocations, however, asset owners remain keen to add to private equity, private debt and infrastructure allocations. For each asset class, more than half of the respondents said that they planned to increase weightings over the next three to five years.

³ Source: Preqin

Managers have seen high inflows to private debt funds

Private equity and real estate are widely offered, by 75% of asset managers, with an average of 12 funds per manager. Despite being offered by fewer managers (62%), private debt has the highest approximate AUM (\$13.2bn) at managers, showing the high demand for an alternative to low yields on core fixed income.

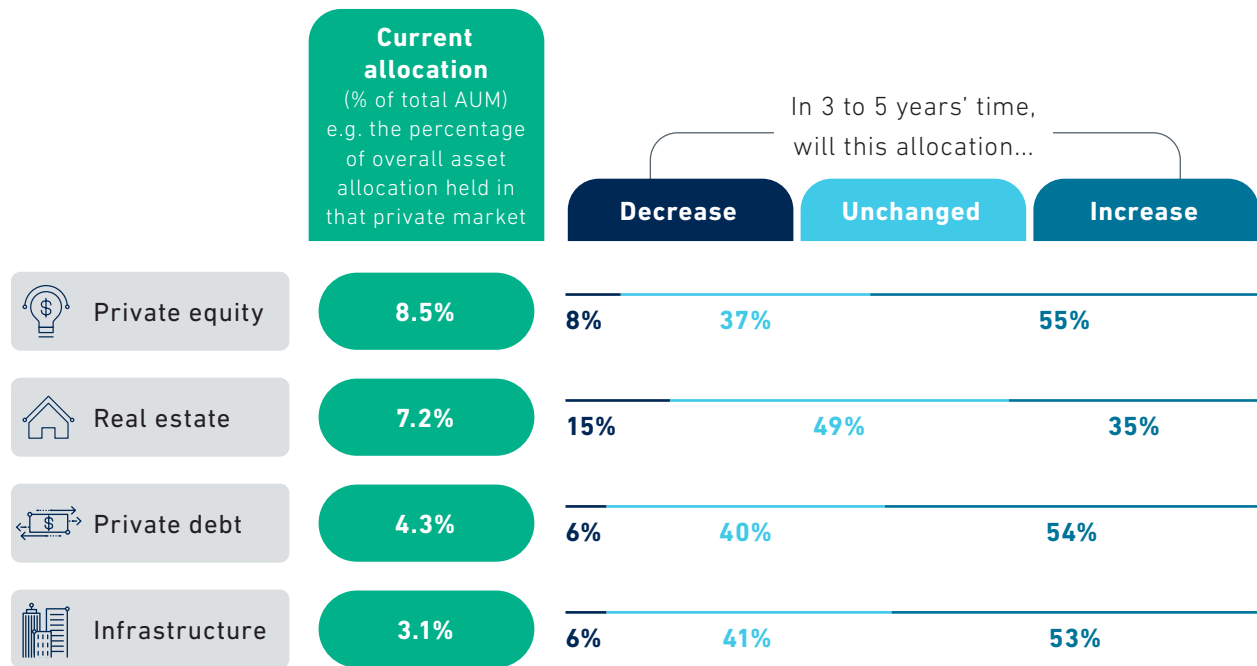


%Yes, multiple answers allowed

Note: Manager respondents were asked for their approximate AUM managed and the number of different funds they run for each category of private markets, with the average figures for approximate AUM and number of funds shown here.

For many asset owners, private markets allocations are set to rise

Nearly half of asset owners plan to increase allocations to private equity, private debt and infrastructure in the next few years. For real estate, just over a third (35%) plan to allocate more, while 15% plan to cut real estate.



Data may not sum to 100% due to rounding

In real estate, the outlook is slightly different. More asset owners seem content to hold their current asset allocation to this asset class (49 percent) than increase (35 percent). A further 15 percent plan to decrease exposure to real estate, significantly higher than the proportions for the other subsets. The proportion of private markets assets in institutional investors' portfolios is expected to rise in the next three to five years for both groups.

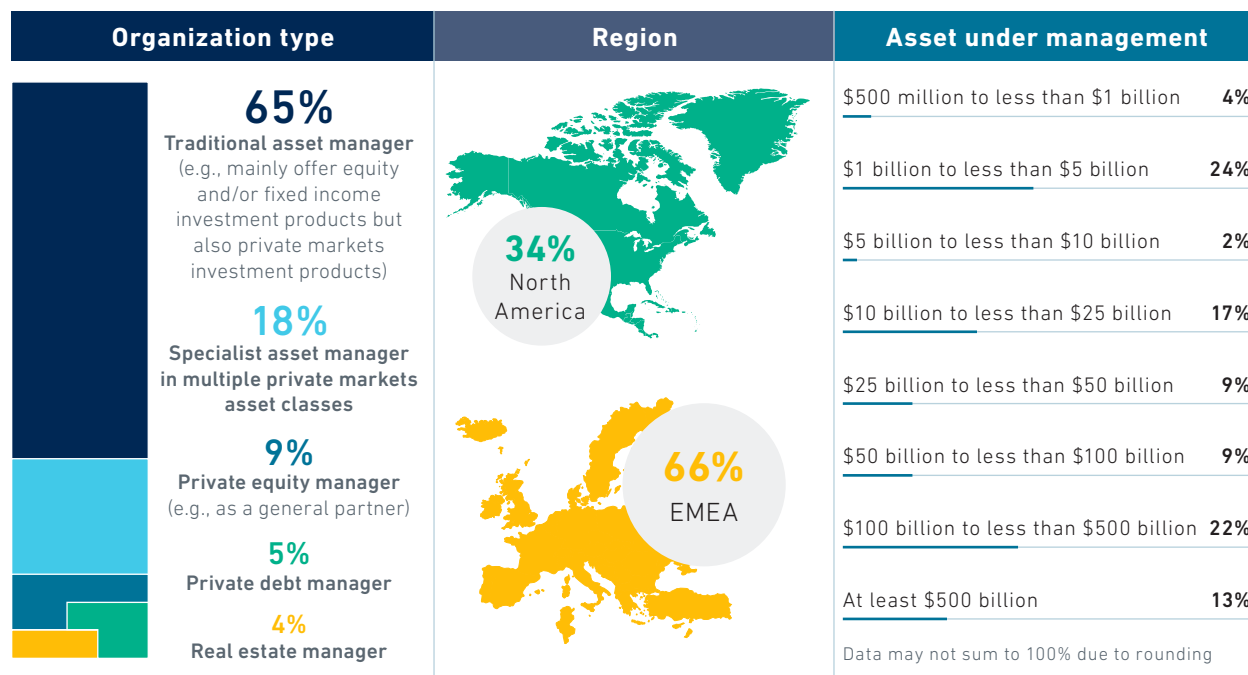
Asset managers expect average exposures to private markets assets to grow from 30 percent to 35 percent, while asset owners' allocations are set to increase from 22 percent to 28 percent. While this is the global story, we identified some significant differences in allocations and demand

for each private market asset class, and between the two main regions – North America and Europe – that the survey covered.

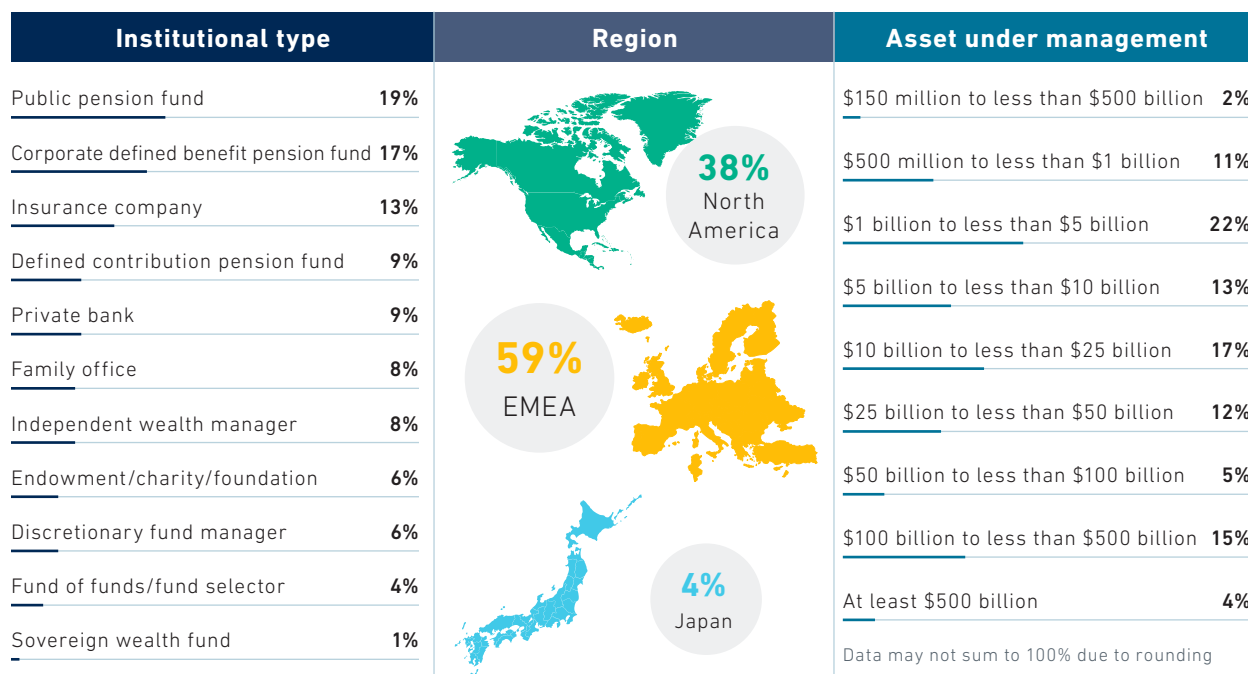
The transatlantic differential between asset managers outlined above is set to widen further. The survey showed that European asset owners are much more likely to raise their private equity allocations, while North American asset owners are keen to boost their private debt holdings.

The latter group already holds more on average in real estate and infrastructure than European peers, and North American asset owners also plan to increase these existing allocations by more than Europe-based investors.

Asset manager respondents by organization type, region and AUM



For many asset owners, private markets allocations are set to rise



Increasing preference for private markets

The four core areas of private markets have qualities highly sought after by investors.

These range from capital growth to income generation and inflation protection to diversification – all with different levels of applicability depending on the asset class and strategy. However, our survey showed that each subset of private markets had its own predominant quality. Of the asset owners surveyed, 91 percent said they saw potential for capital growth or alpha as a key attribute of private equity, for example.

With private debt, attractive yields and income generation were cited as key attributes by 84 percent of asset owners. Inflation protection was the biggest attraction for real estate, with 64 percent of investors selecting it.

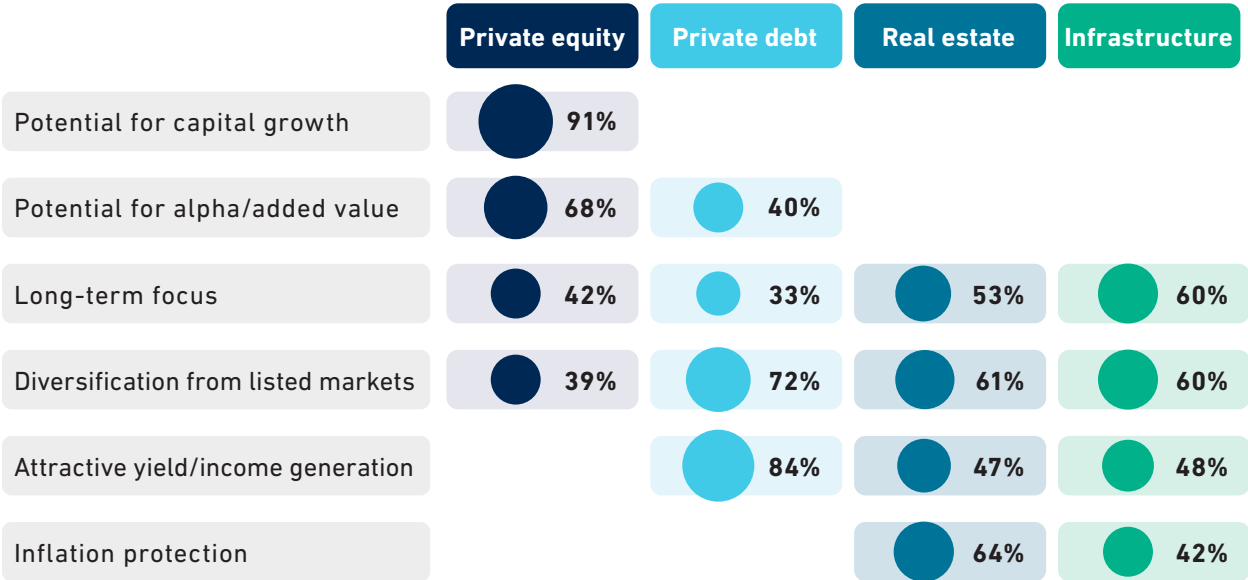
For infrastructure, the key qualities were diversification (62 percent) and the asset class' long-term nature (60 percent).

Rich valuations in public markets are also prompting investors to look at private markets. More than a quarter of asset managers (27 percent) and asset owners (29 percent) cited this as a factor, while a greater desire for portfolio diversification was also a key driver of interest in unlisted assets.

Prolonged low interest rates and ultra-low public market yields also provide some of the impetus for investors looking beyond traditional, listed assets markets towards private equity, private debt, real estate and infrastructure. Managers and owners also cited "better opportunities for return generation" and more attractive and stable yields or income levels.

Owners on the main attributes and hurdles in private markets investing

- While all four private market assets are seen as diversifying and having a long-term focus, other attributes vary between them, with income generation important for all but private equity, which gives capital growth instead.
- Private equity and debt offer alpha potential, while real estate and infrastructure give inflation protection.



The challenges in the alternatives marketplace

There are also several barriers and factors that can detract from the draw of alternatives. Chief among these is high costs or unclear fee structures, while illiquidity is also an issue for some investors.

In addition, the sustained popularity of private assets and high levels of inflows has led to a concern that some areas may be overcrowded. The top 25 global private equity managers held more than half a trillion dollars of private equity money in 'dry powder' – uninvested capital waiting to be deployed – as of August 2021⁴,

demonstrating a relatively low number of high-quality investment opportunities amid rampant demand and competition.

Asset managers are also concerned about weak accounting and audit standards in the private markets sectors. Almost two thirds, or 64 percent, say they believe weaknesses in these areas have a negative impact on the growth of private markets investing. Other concerns include a lack of information regarding ESG criteria, as well as a lack of quantitative data and research.

In the next section, we will explore the data dilemmas faced by asset owners and asset managers in more detail.

40%

of institutional investors cited overcrowding as a concern and a barrier to adding to private markets exposures.

64%

say they believe weaknesses in private markets sectors have a negative impact on the growth of private markets investing.

⁴ Source: 'Half a trillion dollars of dry powder held by 25 PE firms', S&P Global Market Intelligence, 24 August 2021. <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/half-a-trillion-dollars-of-dry-powder-held-by-25-pe-firms-66172037>

Data dilemma: Challenges and solutions

Having the right data at the right place when stakeholders need it is increasingly vital for asset managers and asset owners.

Regulators at national and international levels are demanding more information about organizations' risk exposures, while in some regions ESG-related reporting is coming to the fore as a regulatory requirement.

In public markets, particularly equities, data is structured and the quality and the speed at which information is disseminated

are generally very high. In private markets, data is largely unstructured and underlying assets have bespoke and complex financial models, which means that myriad challenges related to data are yet to be solved. In addition, there is much work to be done to harmonize reporting standards.

Private markets investors need consistent asset-level data across their portfolios for a variety of purposes, such as performing forward-looking scenario analysis, helping with deal origination, calculating valuations, portfolio monitoring and risk management.

Asset managers and asset owners overwhelmingly agree that improving the uniformity of data in private markets as well as its timeliness will boost investment in these sectors.

Asset owners' perspective of challenges in private market investing

Generally, asset owners want to invest more in private markets, but several issues restrict their ability to do so. Asked how they believed data and technology could boost private markets allocations, asset owners cited improved transparency, product availability and better data quality.

These were particularly important issues for wealth management organizations such as private banks, family offices, discretionary fund managers and independent wealth managers. Many of these client groups are entering private equity for the first time and are likely to have high expectations set by experience in public markets.

This means that having a robust data management architecture will increasingly be seen as a competitive advantage for asset managers.

More than two-thirds of asset owners say there is a significant opportunity cost as a result of dealing with problematic private markets data. Sourcing high quality opportunities, collecting

and processing the necessary data, and other related administrative tasks all take up more time in private markets, leaving staff with less time for other tasks and limiting their ability to expand the portfolio.

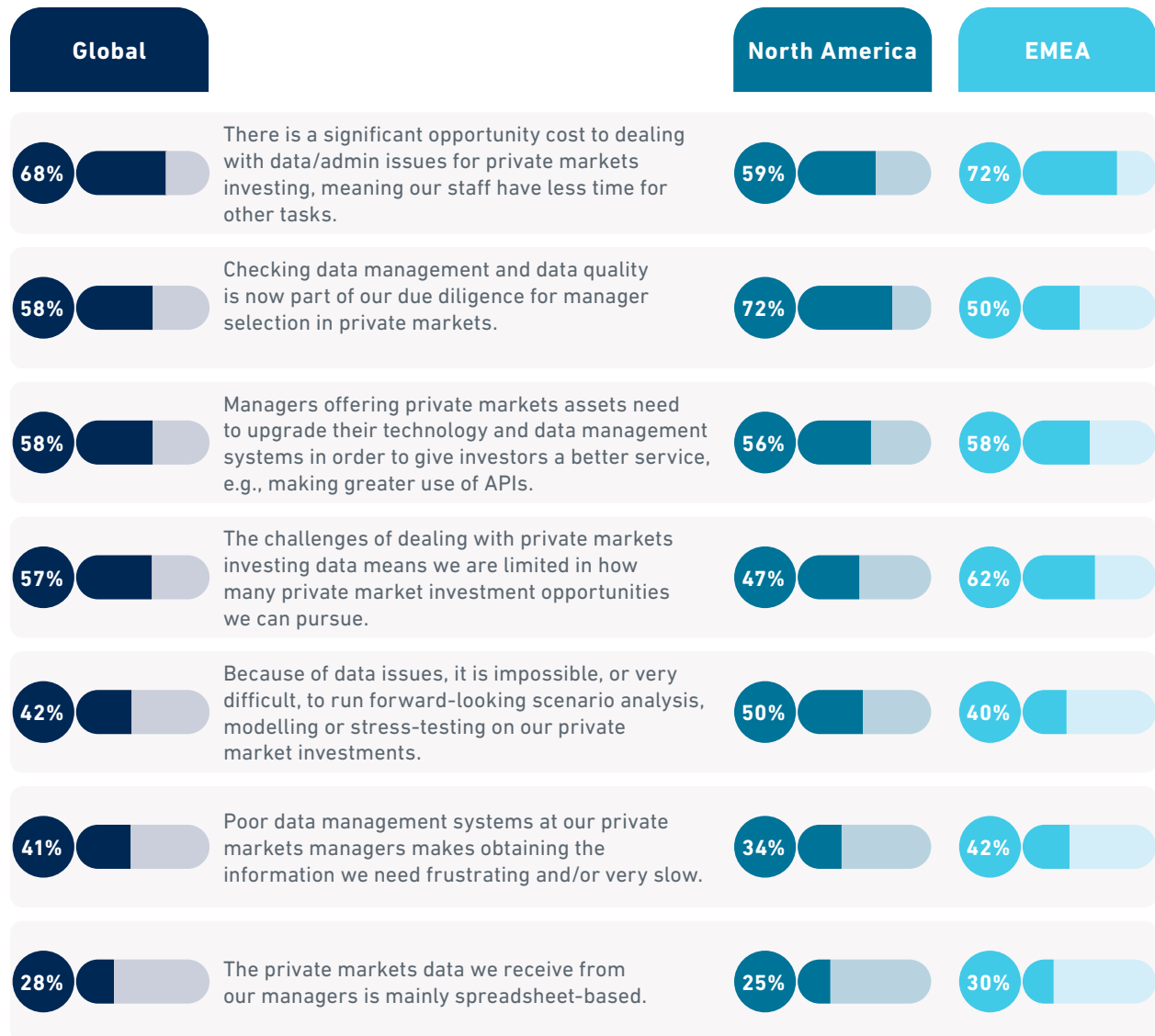
Solving or mitigating these issues takes a significant amount of staff time for asset owners, meaning these allocations are resource intensive. Some asset owners are particularly sensitive to this: public sector pension funds in the United States have been criticized in recent years for the high cost of their private equity portfolios relative to public markets funds and holdings.

It is no surprise, therefore, to discover that checking data management and quality formed an important part of asset owners' due diligence processes when selecting private markets managers, particularly for those based in North America.

More than half (58 percent) agreed that managers operating in the private markets sectors needed to upgrade their technology and data management systems to improve their service, including making greater use of application programming interface (APIs), for example.

For asset owners, dealing with manager data can be a burden

For over half of owners, private markets data imposes a significant opportunity cost, reducing time for other tasks and chances to invest elsewhere in private markets. It is now a manager selection issue for most owners.



% Agree (4+5)

Employing technology to break down silos

Despite asset owners' wishes, asset manager's data management systems lack the capabilities to fully meet client demand.

More than two-thirds of asset manager respondents (69 percent) said they provide "siloed" data reports to investors – i.e., a format that does not allow for the data to be directly integrated into investors' systems, such as in spreadsheets or PDFs. A similar proportion said they provide ad-hoc reporting customized to investor requirements.

These ways of working are resource intensive and can make obtaining a unified, overall portfolio view difficult for both asset managers and asset owners. Relevant data resides in disparate systems and documents with no cohesive approach or standard format.


Outdated processes such as the use of spreadsheets and macros increase the time required to process information and are more error-prone. In addition, it can be harder to scale up strategies if the technology being used cannot keep up with additional demand for information or increasing numbers of inputs.

Only 21 percent of asset managers offered interactive online tools or services to enable investors to analyze data themselves, and just 15 percent offered direct automated data feeds through technology such as APIs.

This will likely prove to be a deciding factor for many clients in the months and years ahead, especially those catering to younger savers.

This demographic is used to accessing information online and via mobile devices such as smartphones and tablets. If they cannot access their retirement or investment account in this way, they are likely to migrate to a provider that can facilitate such access.

For wealth managers, discretionary fund managers, defined contribution pension providers and similar client groups, APIs and the ability to seamlessly integrate with end-user platforms is increasingly important for functionality and client retention.



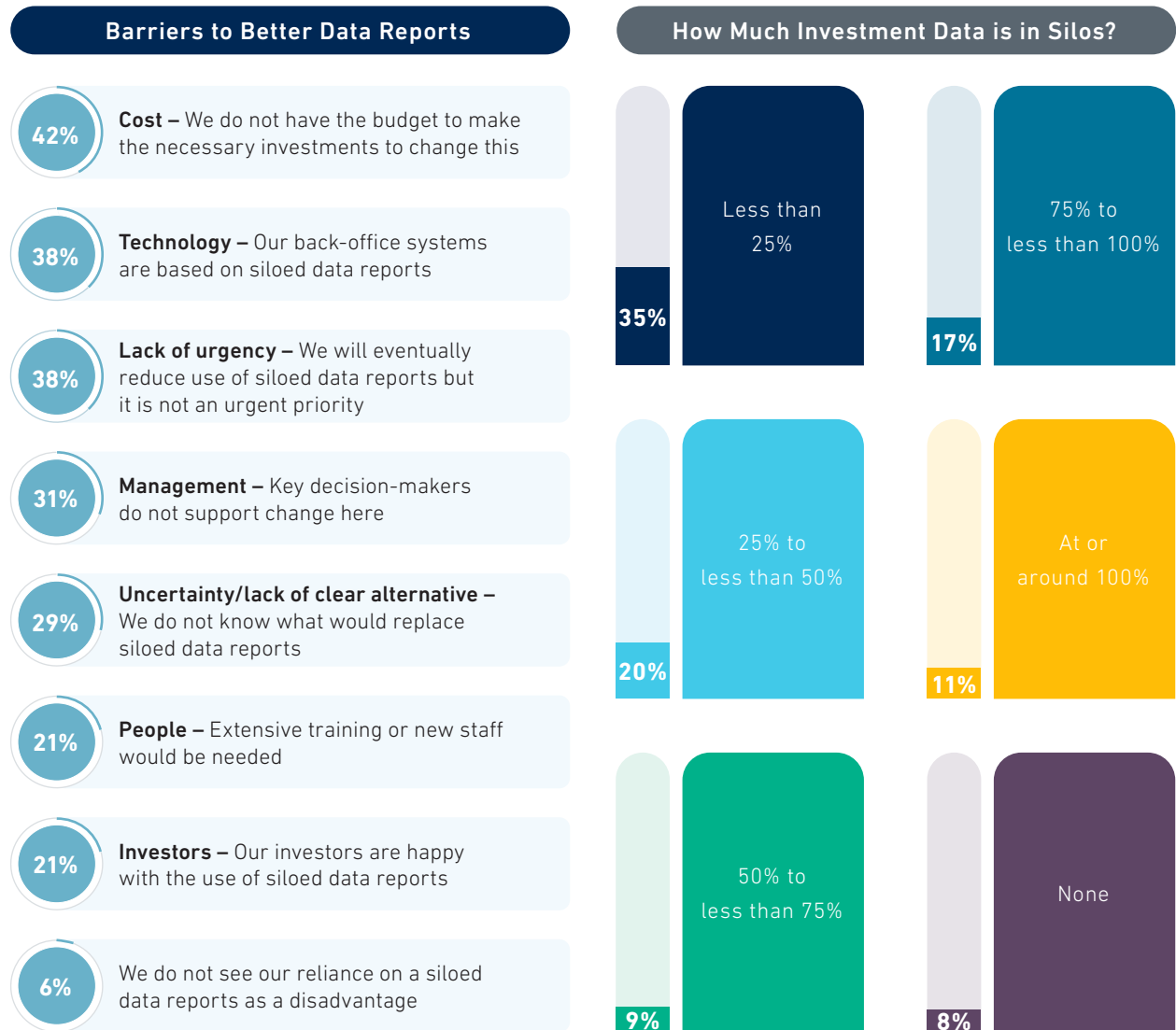
What is holding asset managers back from investing more into their data management systems?

The primary barrier here is cost. A significant proportion of asset managers agreed that they did not have the budget to invest in technology upgrades, despite many admitting that their back-office systems rely on the siloed approach to data. While fixing this issue has many important benefits, which we will explore in this report, managers are concerned that wholesale changes could prove significantly disruptive to day-to-day operations.

Meanwhile, one in five managers cited the potential requirement for "extensive training or new staff" as a barrier. A lack of knowledge of alternative options and management inflexibility were also highlighted as issues.

There is a mix of barriers holding back managers from better data reports

- Cost is a key reason for relying on siloed data reports, as well as systems issues and a lack of urgency on this.
- Only 35% of managers have less than 25% of investment data held in siloed data reports.



% Yes, multiple answers allowed

Data may not sum to 100% due to rounding

Manual processes: A deterrent to timeliness

It is clear from the survey’s findings that there is a disconnect between asset managers’ views and priorities regarding data, and what asset owners want and expect from their service providers.

To demonstrate this, we asked both groups for their views on how long it takes to generate the net asset value (NAV) of a portfolio and to put together forward-looking analysis based on a market event such as interest rate increase.

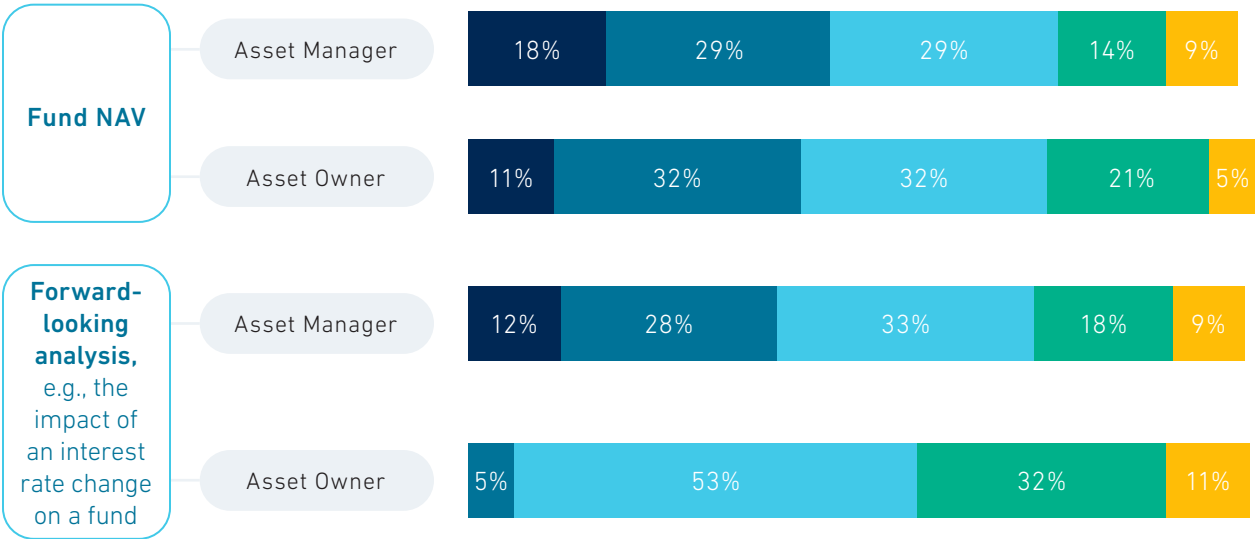
While managers and owners are fairly aligned on how long it takes to strike a fund NAV – almost half of the managers said it takes up to

a week or more – the difference in perception on time required to run forward-looking analysis was stark. 51 percent of asset managers and 85 percent of asset owners said it takes up to a week or more to run scenarios across their portfolios.

Manual processes are a significant factor in the time it takes to generate these analyses or reports. Four in five (81 percent) asset managers said forward-looking analysis relied on manual processes to some extent – including 44 percent that said manual inputs were relied upon “to a very large extent”. More than three quarters (76 percent) said a fund NAV calculation relied on manual processes to some extent, leaving plenty of room for improvement.

Private markets data calculations can take a long time to produce

While owners and managers have similar views on how long it would take a manager to produce a fund NAV, views diverge on forward-looking analysis from managers, with most owners expecting it to take up to a week, if not more than on week, while managers are more optimistic on the time taken.



● Less than 5 minutes ● Up to 1 day ● Up to 1 week ● More than 1 week ● Don't know

Data may not sum to 100% due to rounding

Increase in spending plans

Technology spend is set to rise as asset managers respond to investor demand and ever-evolving regulatory requirements.

Fund managers are looking for the capabilities to streamline data collection, improve reporting, analyze risk and performance, and organize complex, nonstandard datasets such as ESG metrics or alternative data.

When asked about technology development over the next two years, 47 percent of asset managers said they were planning to develop or acquire technology tools for portfolio monitoring. Other priorities included the development of customized investment solutions and in-house data management systems.

Only 26 percent said they were looking into third-party options to meet their technology needs, while 15 percent said they will outsource middle- or back-office functions. Going it alone could prove a costly choice for many, as specialized outsourced solutions can circumvent slowly developing in-house solutions and lead to marked improvements for firms at this crucial juncture.

Asset managers will likely have to accept the cost of upgrades if they are to succeed in the long-term in private markets. The growing and dynamic demand for ESG data, a key priority for many institutions, will be a major driver in the need to implement cutting-edge systems.

47%

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A data-driven market for private assets

Asset managers operating in private markets have enjoyed a strong period of growth.

The demand is expected to remain high over the next few years as major investors seek diversification, and improved returns and yields.

The investment case is strong. As well as providing diversification, asset owners and managers can access new opportunities and support social and environmental causes through investment in renewable energy infrastructure or social housing, for example.

For asset managers, the demand is coming from a wide range of channels, providing an

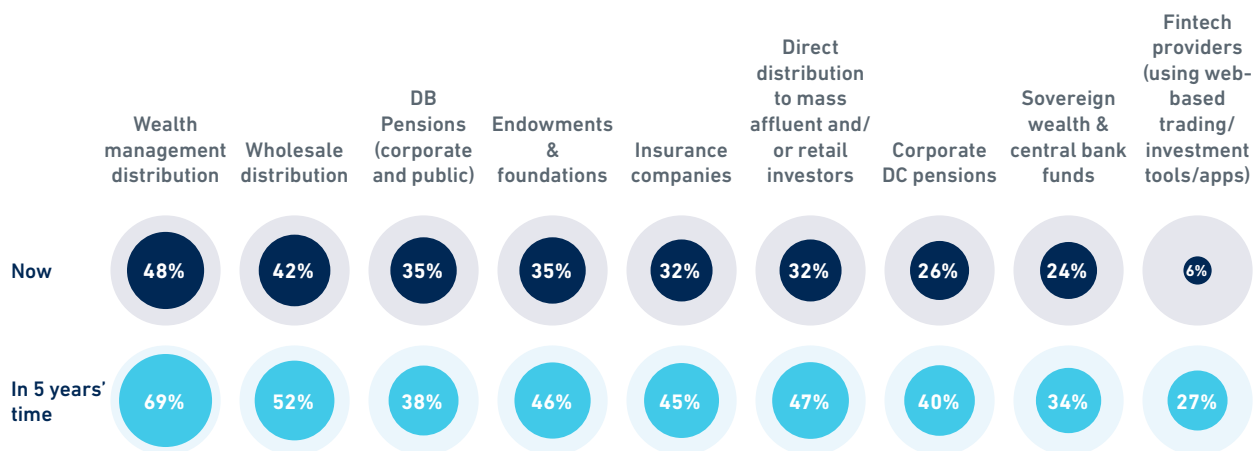
important diversification of client base and revenue sources. Wealth management is seen as a particularly strong distribution channel, especially in Europe, but defined contribution pension providers and financial technology specialists are also expected to become more important.

Endowments and foundations are also expected to overtake defined benefit pension funds as a revenue source for asset managers as the global retirement landscape shifts.

These new or growing client groups will have their own specific requirements regarding data and reporting, putting more pressure on asset managers to have their data processes in order.

Managers are optimistic on a wider demand for private markets

Asset managers see all investor types and distribution channels becoming more important in five years' time, particularly DC pensions, wealth management distribution, fintech providers, direct distribution and to insurance companies. And endowments & foundations will overtake DB pensions in importance.



% Important (4+5)

However, to truly capture the next stage of growth in private markets and meet rising investor expectations, asset managers will have to put money to work improving their data management and reporting processes.

Clients of all kinds expect their providers to have sophisticated technology to enable accurate reporting of performance, valuations and ESG-related data. Asset managers are willing to explore new data tools but are hampered by costs and concerns that wholesale changes will disrupt day-to-day client services.

In-house systems, while built to support the unique needs of individual asset managers, also require significant resources to maintain and ensure smooth integration with other systems and data sources.

On top of this, our survey has also shown a significant reliance on manual processes for data input and analysis. This can create issues further down the line due to human error or inconsistency of data.

Integration is a key element of most solutions in private markets. Having one integrated platform allows a manager to confidently venture into new asset classes with scale, flexibility and adaptability.

For institutional investors, access to insights and performance capabilities designed specifically for private markets can help generate alpha. An integrated platform also allows managers to access data and fund servicing specialists to access consolidated information, reporting and insights.

Furthermore, having all business lines on one tightly integrated solution can improve decision making and strengthen compliance processes, while also supporting clients' reporting requirements.

The right platform can also provide agility, with faster responses to client and reporting demands, and enhance risk management. It should also improve access to flexible cloud-based asset management tools such as deal management, ESG reporting, investor relations and portfolio monitoring.

The private markets world is changing. Demand is growing for existing and novel types of investments and data, both from existing investors and from a whole new class of investors – and expectations are high. Investors want data fed directly into their systems as they are accustomed to with public assets. Operating models based on outdated systems and processes cannot be expected to cope with the challenges of today, never mind tomorrow.

That said, the industry is rising to the challenge. Single, harmonized platforms for front-, middle- and back-office functions are available with greater integration across the whole investment lifecycle. These services can significantly streamline processes, standardize data and reduce costs.

The opportunity is vast and those that recognize the importance of modernizing their technology will be in good stead to capitalize.

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