APPENDIX A

Strategic Asset Allocation
A Review of Options
London Borough of Bromley Pension Fund

DECEMBER 2019

Background

MJ Hudson Allenbridge produced a report into the Fund's Strategic Asset Allocation ("SAA"), which was considered at the recent PISC meeting on 3rd December 2019. This report made a number of recommendations based on the Fund's current funding level and cash flow requirements. Of these recommendations, the committee asked for further details on two potential areas for investment and a recommendation on where, if any, assets should be sold to finance these. This paper looks to cover these issues.

Summary of Recommendations

To alter the SAA by a divestment of 5% from Investment Grade Credit and 5% from Global Equities and a reinvestment into a 5% weighting in International Property and 5% into Private Equity ("PE").

To rebalance the Fund towards the new SAA.

MJ Hudson Allenbridge would recommend accessing International Property via a Global Property manager using a value-add strategy (explained later) and most commonly accessed via a close-ended fund of 10-15-year duration with leverage of around 50%.

Investing in up to 5 PE funds to provide sufficient diversification by fund type, investment area and vintage, again via a close-ended fund using an element of leverage. Different approaches to investment are described later.

Asset Class	Existing SAA	Recommended SAA	Existing TAA (30/09/19)	Assets transitioned (Estimated)
Global Equities	60%	55%	63.75%	-£90m
Investment Grade Fixed Income	15%	10%	13.20%	-£35m
Multi-Asset Income	20%	20%	18.75%	+£15m
UK Property	5%	5%	4.30%	n/a
International Property	n/a	5%	n/a	+£55m
Private Equity	n/a	5%	n/a	+£55m

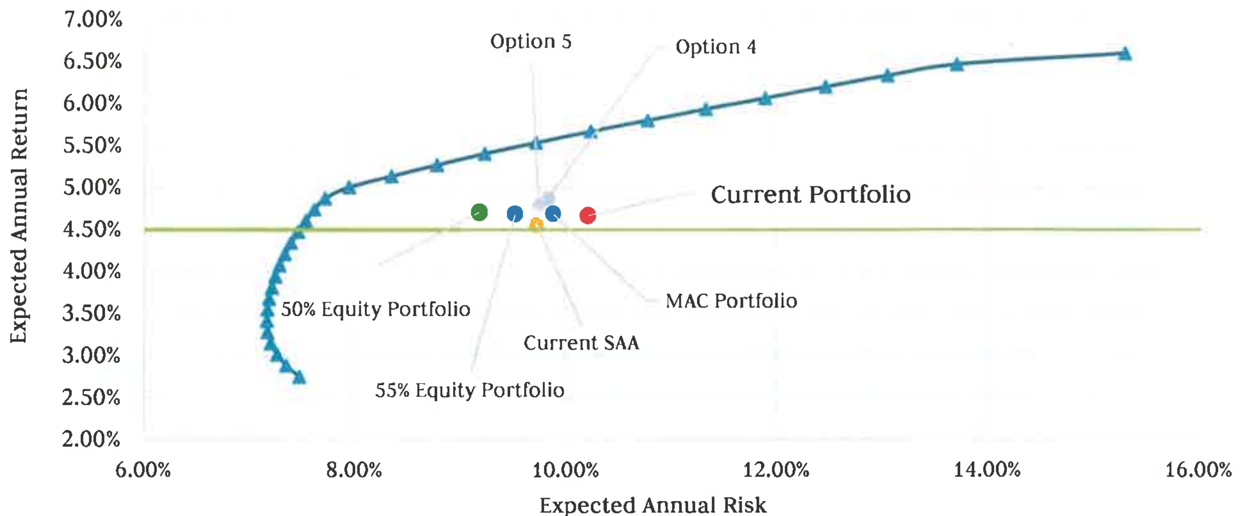
In reality, the Committee sets the Tactical Asset Allocation, which can differ from the SAA to reflect shorter term investment views. Whilst I would not put too much weight on these, in the interest of simplicity, it may be worth realising the entire Baillie Gifford Fixed Interest portfolio, currently valued at £63m, and slightly less Global Equities to finance the new investments. This would leave the Fund approximately 1.7% underweight Fixed Interest and correspondingly 1.7% overweight Global Equities against the new SAA.

We would note that the new asset classes are illiquid and, as such, it will take time to deploy the capital. Current investments will therefore need to be realised as and when required, unless there is a sufficient reason to pre-fund any purchases. We would also note that these changes involve investing into more complex asset structures, which will increase the governance burden and cost in terms of manager fees for the Fund. However, we believe the resulting SAA would add to the diversification of the Fund and better position it to deliver the required investment return and cash flows into the future.

SAA Modelling

As before, this was conducted via a mean variance optimisation model developed by MJ Hudson Allenbridge using return and volatility data from the forecasts of a number of asset managers, including those used by the Fund.

The efficient frontier shown in the chart below is the same as that used in the initial SAA report constraining global equities to a minimum of 50% of total assets but otherwise allowed to allocate freely to all asset classes.



The dots on the chart correspond to the following options:

1) MAC portfolio – Move 5% from Investment Grade Credit to a Multi-Asset Credit portfolio (taking higher credit risk)
2) 55% Equity portfolio, as above but including a further 5% switch from Global Equity to International Property
3) 50% Equity, as above but including a second 5% switch from Global Equity to PE and Infrastructure
4) 5% reduction in Global Equity and Investment Grade Credit switched into PE and International Property
5) 5% reduction in Global Equity and Investment Grade Credit switched into PE and existing portfolios of Multi-Asset Income and UK property

As can be seen from the chart, both new options 4 and 5 do little to reduce risk compared to the current SAA, but do improve forecasted investment returns. The reason for this is that the Fund's current holding in Investment Grade Fixed Income is a low return but diversifying asset, which is negatively correlated with Global Equities (the majority of the Funds existing assets). Reducing the Fixed Interest element in the Fund reduces the level of diversification, as the potential replacement assets (PE/International Property/UK Property/Multi-Asset Income) have a higher forecasted return but are more correlated to Global Equities.

Whilst this is true, over the long-term we would regard either of the two new options (4 and 5) as acceptable outcomes and be particularly supportive of option 4 as the outcome of the SAA review. This is due to the outlook for Investment Grade Bonds as low return assets, . If the Committee wishes to reduce risk along with improving forecasted investment return, we would continue to recommend reducing the current 5% allocated to PE down to 2.5% and adding an allocation of 2.5% to Infrastructure. The more stable returns and the element of inflation linkage available from investing in infrastructure would be risk reducing for a majority equity and return focused fund such as the London Borough of Bromley Pension Fund.

International Property

This asset class provides a good forecast investment return with some diversification from Global Equities and strong cashflow characteristics.

Whilst property will always be affected by the state of the global economy and, as an illiquid asset, can see a marked fall in value in turbulent market conditions, each individual property, by its nature, is driven primarily by local factors. Property has no known price mechanism unless it is in the process of being traded, relying on valuers to make an informed but somewhat subjective decision on the value for the majority of the time. Because of this, and the inherent illiquidity of the asset class, all property investment should be considered as a long-term commitment.

The table below shows the investment returns for various property markets over the 10 years to 2016.

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia 18.4%	Canada 3.7%	UK 3.5%	UK 15.1%	Canada 15.5%	Canada 14.2%	USA 11.4%	UK 17.8%	Australia 14.0%	Australia 11.9%
France 17.8%	Germany 2.8%	Germany 2.0%	USA 14.8%	USA 14.5%	USA 10.8%	Canada 10.7%	USA 11.2%	UK 13.1%	France 7.8%
Canada 15.9%	Australia 0.1%	Canada -0.3%	Canada 11.2%	Australia 10.3%	Australia 9.5%	UK 10.7%	Australia 10.6%	USA 12.1%	Germany 7.8%
USA 14.4%	France -0.9%	France -1.4%	France 10.0%	France 8.4%	France 6.3%	Australia 9.6%	Japan 7.8%	France 9.0%	Japan 7.6%
Japan 11.3%	Japan -0.9%	Australia -2.4%	Australia 9.4%	UK 7.8%	Germany 4.2%	Japan 6.0%	Canada 7.3%	Japan 9.0%	USA 7.5%
Germany 4.5%	USA -7.4%	Japan -6.1%	Germany 4.2%	Germany 5.3%	Japan 3.6%	Germany 5.2%	France 6.3%	Germany 8.1%	Canada 5.7%
UK -3.4%	UK -22.1%	USA -17.5%	Japan 0.6%	Japan 3.2%	UK 3.4%	France 5.1%	Germany 6.0%	Canada 8.0%	UK 3.9%

This chart is for illustrative and discussion purposes only. Returns are shown in local currency. Source: MSCI, Pension Real Estate Association data as of 31 December 2016.

Whilst there will be wide variation around the average figure for each market, the table does show that each market has its own performance cycle reflecting more local, country specific factors. However, the low level of returns across all markets in 2008/9 illustrates that each property market will be influenced by the global economic outlook.

Whilst investment into UK Commercial Property is often seen as a 'core' or 'core-plus' strategy, we would recommend investing into International Property via a 'value-add' strategy. This specifically targets the acquisition of assets to which the manager can add value, either by improving the quality or quantity of the rental book. This increases the focus on the local, idiosyncratic nature of each property, adding further diversification, and avoids the investor making a long-term commitment to a specific geographical region which may enter a period of poor investment returns not foreseen at the present time. It is also difficult to find an institutional property manager who has truly global resources to cover all markets on a buy and hold basis. 'Value-add' does not mean taking on greenfield development risk but could involve a property requiring an element of investment post-acquisition, in order to get the best rental value going forward.

Regarding investing in the US or internationally, we would recommend the latter. As can be seen from the table, market returns will differ by country and thus having the flexibility to invest where the best medium (3-5 years) return is forecast should help maximise returns.

Whilst the US on its own encompasses a wide variety of individual, local, property markets, it will be influenced by the overall economic outlook for that country's economy. The US is later in the economic cycle than the rest of the world, having recovered earlier from the Global Financial Crisis of 2008/9, and seems to have a relatively high level of political uncertainty at present. Whilst the US may be a beneficiary of a global trade war, we are not convinced that a major breakdown in global trade is the new reality, more that global trade relations will remain more fractious even if President Trump reaches an accord with China in the run up to the US presidential elections next

year. The era of outsourcing to low labour cost countries may now have passed its peak, as the level of added complexity from a global supply chain outweighs the cost savings.

There are a number of asset managers offering Global property mandates with a 'Value-add' approach, these funds tend to work with a gearing level of around 50% and are close-ended with initial investment periods followed by the return of capital over the ensuing harvesting period. The structure of these funds is not dissimilar to that of PE and, as such, is covered in more detail in the next section.

Private Equity - A brief history

PE investing involves the acquisition and subsequent sale of private companies. The genesis of PE as an institutional asset class can be traced back to the creation of the American Research and Development Corporation (ARDC) in 1946[1] and the creation of Small Business Investment Companies (SBIC) by the US government in 1958 to provide funds for privately-owned and operated venture capital investment firms in the form of long-term debt and equity investments to high-risk small businesses. From the 1960s to the late 1980s, Venture Capital ("VC") was the predominant form of PE with the rise of technology companies. Through the 1980s, PE moved away from solely start-ups to providing finance to more established businesses. Initially this was in the form of expansion capital to help existing businesses achieve their growth plans or in the form of conventional Management Buyouts ("MBOs") where owners were able to transfer their ownership to incumbent management teams. The late 1980s saw the rise of the Leveraged Buyout ("LBO") where acquisitions of large public or private companies could be achieved by using significant level of debt as part of the acquisition financing. Since the 1980s, PE has grown significantly in terms of the areas that it touches and the quantum of capital that has been attracted to the asset class.

The primary rationale for investing in PE is to generate excess returns over equivalent quoted equity benchmarks. Given the low yield environment prevalent over the last decade, institutional interest in the asset class has grown significantly, such that private equity assets under management have almost trebled, from £1,425.1bn in 2008 to £4,105.5bn as of 30 June 2019[2].

Investment routes

There are several routes to investing in PE, ranging from commitments to funds or funds of funds, direct investments, and co-investments made alongside a PE fund manager. Each involves different costs and offers an investor varying levels of control over individual private equity assets.

We note that the vast majority of investments in PE made by institutional investors are through **funds**. When choosing to invest in PE via funds, investors are able to commit to **primary funds**, whereby they commit to a blind pool of capital (fund) being raised by a PE manager, which will be invested over the finite term of the fund. Alternatively, investors are able to invest in a **secondary position**, acquiring a stake in an existing close-ended fund from an existing investor who wishes to exit their investment ahead of the fund's termination date, or by committing to a **secondary fund**, where the manager deploys capital to acquire several such secondary positions.

Funds vary broadly in terms of size, geographical focus, sector focus and strategy, enabling investors to access a diverse range of assets in return for paying a management fee and carried interest (a share of any profits generated which is allocated to the investment manager, also known as "carry"). It is important to note, however, that conducting thorough due diligence of a PE manager is time intensive and requires substantial knowledge of the asset class. Should an investor wish to make commitments to several managers (such as the commitment to five managers over a two-year period discussed below), the manager selection process will likely need to be extensive to ensure proper diversification and will, therefore, be more expensive than traditional market searches.

[1] by Georges Doriot (regarded as the founding father of US Venture Capital) to encourage private sector investments in businesses run by soldiers who were returning from World War II. ARDC's significance was primarily that it was the first institutional PE investment firm that accepted money from sources other than wealthy families.

[2] Source: Preqin, Charts, Dry Powder & AUM, Assets under Management breakdown, excludes fund of funds and secondaries to avoid double counting.

Investors are also able to access PE investments by committing to a **fund of funds**, which is a fund that invests in numerous other PE funds. This route to investment is particularly advantageous for smaller or newer investors seeking broad exposure to PE, as they are able to access several funds, managers, strategies, sectors, vintages (the year a fund was launched) and regions via a single investment vehicle, thus presenting a lower due diligence and governance burden than allocating to individual funds. Additionally, a fund of funds will often allocate to a combination of primaries and secondaries and sometimes also to directs and co-investments (defined below), enhancing diversification. A disadvantage of this approach is that returns will be impacted by the double layer of fees charged by both the underlying fund manager and the fund of funds manager.

Where an investor's commitment size is large enough, some managers may be willing to invest a separately managed account (SMA) on their behalf, although the minimum commitment size tends to be around £100m (this will vary by manager). With an SMA, investors may be able engage a PE manager to invest directly in a portfolio of private companies or engage with a fund of funds manager who will make commitments to several funds / other managers.

Fund structure

Typically, PE funds are structured as finite-term (generally 10-12-years), close-ended limited partnerships[3]; the manager assumes the role of "general partner" (GP) with unlimited responsibility for investing the fund commitments, while investors have limited liability as "limited partners" (LPs).

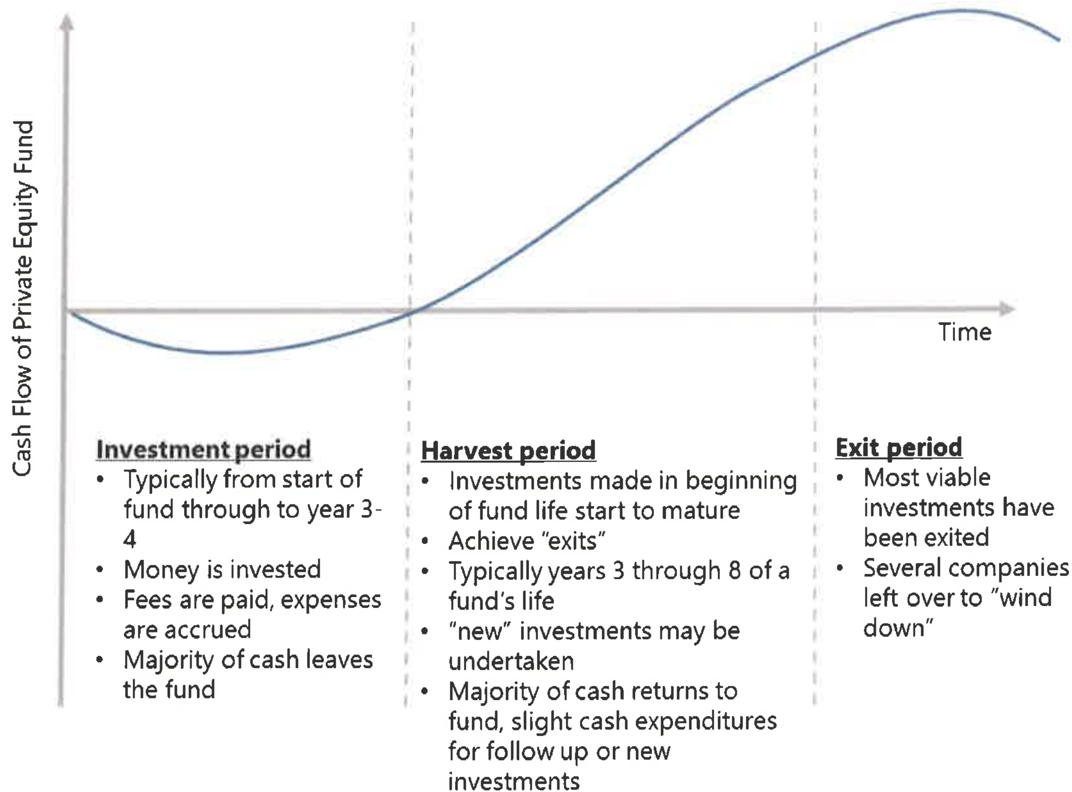
With a primary fund investment, it takes time for a manager to deploy committed capital and construct the portfolio, since transactions in the private market take time to negotiate. Fees are often payable on committed capital before it has been invested (although there is mounting pressure within the industry for this to change, and for fees to be charged on invested capital). The current convention of charging management fees on committed capital subjects investors to the payoff "j-curve," whereby returns are negative as capital is drawn (called) by the manager and used to acquire assets during a defined investment period (typically 3-4 years) before investments are sold and capital is returned gradually (via distributions) during a harvesting phase.

Acquiring an interest in an existing fund, referred to as a secondary position or investing in a fund which targets existing PE funds, mitigates the j-curve effect by giving new investors immediate access to a more mature portfolio, without having to pay fees on undeployed capital during the investment period. Moreover, secondaries are typically sold at a discount to the net asset value (NAV) of the portfolio and can represent good value immediately (although in this high valuation environment with significant dry powder[4] in the market, some secondary positions have been sold at a premium). However, because the seller of a secondary is an existing investor in a primary fund, the buyer has to guard against any asymmetry of information.

[3] The common legal structure for PE Funds is the Limited Partnership. A concise definition of a Limited Partnership is "a partnership with at least one general partner and a limited partner, the latter contributing financially but not otherwise involved in the business or, generally, personally liable for the debts of the partnership".

[4] "Dry powder" is a common term used in the PE industry to refer to capital which has been committed to PE strategies but has not yet been deployed.

Chart to illustrate the "j-curve" effect



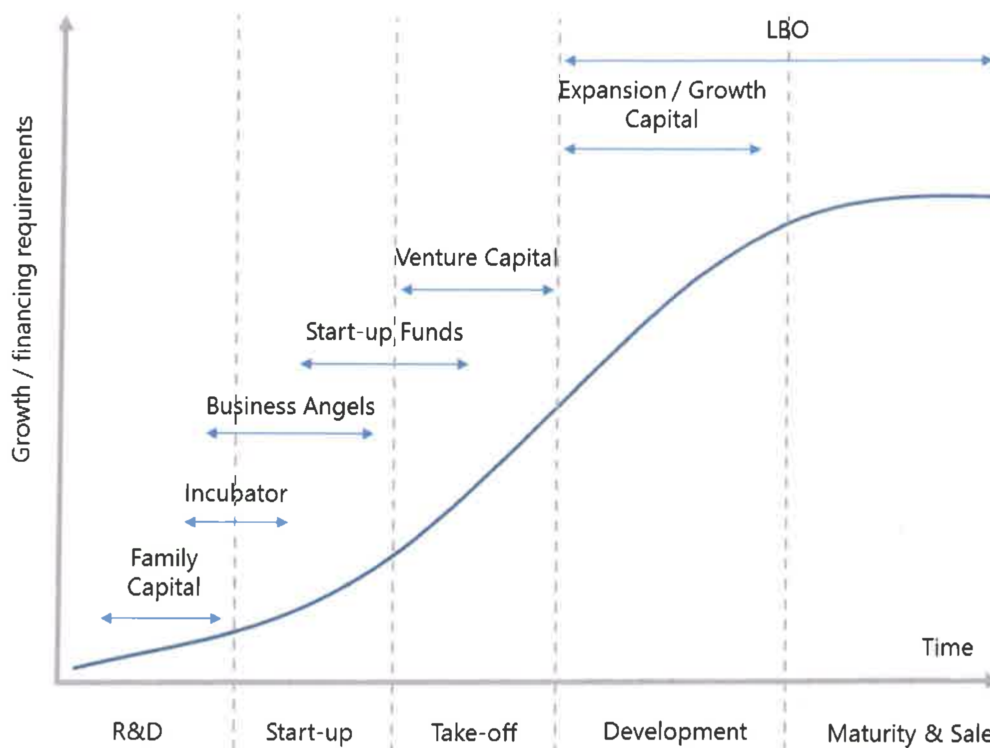
Other investment routes

As the name suggests, **direct investing** involves making an investment directly into a private company asset and bypassing the need for an investment manager. However, this is only an option for the largest institutional investors with their own in-house PE teams, as well as the sizeable balance sheet necessary to commit to a single asset without it exposing their portfolio to significant concentration risk.

Co-investments are direct investments in private companies made alongside an investment manager and are similarly more common amongst large investors, due to the larger investment sizes typically involved in such transactions. More recently, a number of managers have begun to raise dedicated **co-investment fund** vehicles. These provide an alternative source of capital for a manager to draw from more easily when too little capital is available in its primary fund to finance a particular deal (perhaps the manager has sourced this new deal late into the fund's investment period and investing would leave insufficient capital in reserve for follow-on or add-on investments) or when the investment size would introduce significant concentration risk to the portfolio.

PE strategies

PE is a broad asset class and covers a wide range of strategies and an institutional portfolio will usually comprise a mixture of strategies to provide diversification. Investment strategies within PE are often categorised based on the stage of investment and include venture capital (VC), growth and or expansion capital, buyout and distressed, as highlighted in the following chart and table below:



Types of PE strategies

Strategies	Details
Early and late stage VC	VC is investing into newly formed companies that are innovative and have the capacity to grow exponentially. Early stage describes businesses that range from being conceptual through to those having a product in development and late stage, which is where a company may be generating initial revenues and needs capital to grow the customer base and expand the product offering. VC groups invest in "rounds" with each round priced to reflect the milestones that have been achieved. VC is high risk as the rate of failure can be high and therefore Venture Capitalist investors require significantly higher returns from the winners to compensate for the losers.
Expansion/growth capital for small and mid-sized companies	Some small to mid-sized private companies require an injection of capital to help their businesses grow. This may be by acquiring additional plant and equipment, recruiting additional staff or by making acquisitions. In this case, the owners of the company will not want to relinquish control and offer the investor a minority equity position. However, the investor will generally ask for specific rights of which the most crucial is the timing of an exit. This may be in the form of a trade sale but it could be in the form of a "Put" where the owner is obligated to buy back the investor's shares at a predetermined valuation.
Buyouts	A buyout is the purchase or acquisition of a company's shares in which the acquirer gains controlling interest of the targeted firm. Buyouts are divided into two main strategies: **Management buyouts ("MBO"):** MBOs range from small to large and in most instances, it is the incumbent management team acquiring the interest of existing owners. The investors use a combination of debt

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	and equity to finance the acquisition and they expect the acquiring management team to invest alongside them to ensure an alignment of interests. However, the investor has a controlling interest and can make changes, including firing management, to keep the company on track for an exit. **Leveraged buyouts ("LBO"):** In an LBO, the investor takes total control of the company and either brings in new management or re-incentivises existing management. LBOs are distinguished from MBOs in terms of size and targets can be public as well as private companies. The other salient feature is that LBOs are usually highly debt financed with a thin strip of equity. This adds significantly to risk but if the company has sufficient cash flows to pay interest and repay the debt, the return to equity can be enhanced significantly too.
Acquisition of distressed PE interests and distressed debt	Not all investments work out, which can be for a host of reasons although the primary causes are poor management, poor oversight and an excessive debt burden. Rather than seeing a business wither and die, niche PE groups will generally acquire debt or equity (or a combination of both) at huge discounts to NAVs. Often, a business will have filed for bankruptcy and the PE group would steer it through the process as well as developing a plan of action, alongside management, to improve its prospects. There are a number of different strategies emerging today, ranging from low risk acquisitions of distressed senior debt that are collateralised and have a relatively low yield to acquiring highly risky subordinated debt that offer high yields but have a higher probability of failure.

MJ Hudson Allenbridge has published a number of research documents covering the Private Equity market. We attach some of the more recent reports for your interest and to provide you with a fuller understanding of some of the issues that may arise when in investing in this area.

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