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# PENSION FUND LETTER

Building together smart solutions to face a challenging environment

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**We cannot say it is "breaking news", nor a "tipping point", but the obvious should still be stated: Pension funds are facing an everlasting challenging environment. And while they have adapted, in the past years, in order to mitigate the impact of such a new world, new challenges have arisen, as solutions are progressively implemented and markets are evolving.**

## Long-way to adapt

Indeed, for more than 5 years now, investors have had to handle a more complex investment framework. From their weakened funding ratio, they had to face an environment within which rates were decreasing and regulatory pressures increasing. Low rates pushed pension funds to go beyond traditional asset classes and enter into new territories as a mean to harvest yield. In particular, investors had to compensate by on-boarding non-domestic, illiquid and more sophisticated assets. On the Liability risk side, many investors have been caught up in the dilemma to lock in their losses by matching their liability duration or to keep on waiting for interest rate to rise, as "unrealized" losses are not losses until they are "realized". On the "growth" portfolio side, the ideological debate between active and passive management takes on a new significance and markets participants have reacted with new innovations and increasing interests for a "midfield" approach like "smart beta" strategies, and more recently "factor investing".

## New momentum

If much of the described trends are expected to remain, it should be noted that following this "recovery" period, market participants are seeing the first signs of a new momentum made of new breadth, but also new uncertainties. The emergence of reinforced long-term investment goals, and rising awareness of investment's utility are part of this new momentum. Long-term investment incentives, Sustainable Finance through ESG driven investment and green finance, as well as investment to support the Real-economy are gaining more and more attraction. With these new themes, come others like Disruption or de-globalisation, which are bringing uncertainty until it becomes clearer if it has to be put on the risk side or the opportunity side. Overall, pension funds are keeping track off all significant initiatives they've put in place and have now to integrate these new considerations.

As the set of topics to be handled is broad and in continuous evolution, Amundi is happy to issue this new and focused Pension Fund Letter aiming to share our research and insights on these themes. In this first issue, we are questioning the asset allocation and portfolio construction approach. How to build and evaluate a portfolio made of liquid and illiquid assets? Is the liquidity feature the relevant criteria to consider when building portfolio? What about "Factor investing"? How to use these solutions when considering portfolio construction process? You'll find in this edition, the answers of our experts sharing their insights. In addition, a summary of the Create Report 2017 will summarize how European Pension plans have adapted to the market environment this year and what they expect to do in 2017. For any further study on a subject of interest, please remember that our research and management teams remain at your disposal for any further information.

## EXECUTIVE SUMMARY: NEW CONSIDERATIONS ABOUT ASSET ALLOCATION AND PORTFOLIO CONSTRUCTION

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# ASSET ALLOCATION
## IS LIQUIDITY THE RIGHT « FRONTIER » TO CONSIDER? (1/3)

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Chief Allocation Advisor

### Increasing attraction of alternative assets in the current context

Pension funds typically tend to make a distinction between liability-matching and performance-seeking assets in their asset allocation. Pension fund portfolios have historically been invested in high-quality bonds, the duration of which should match that of liabilities. While there are increasing doubts regarding the safe-haven properties of government bonds in the current low interest-rate context, it is clear that they no longer provide sufficient yield to match return targets. Pension funds therefore have to take different routes:

- Leverage their portfolio, whenever allowed, to lengthen its modified duration,
- Accept credit risk by moving into higher-yielding issuers, even though the benefits from such strategy are now limited by the tightness of spread levels,
- Increase international diversification to benefit from higher-yielding markets. Currency-matching constraints nevertheless severely limit this strategy for many pension funds, whereas hedging foreign currency exposure may impact the expected yield pick-up,
- Access the derivatives markets to synthetically achieve exposures to interest rate, inflation and longevity hedges , but this adds complexity and some regulatory risk regarding investment restrictions. Moreover, it does not create extra yield per se,
- Invest in alternative assets providing cash-flow in order to catch the illiquidity premium. Substituting government bonds by alternative solutions nevertheless means that the investor must accept new risk sources to better match its liabilities.

### How to segment allocation to alternative assets?

The term "alternative assets" covers a variety of different assets which present high degrees of idiosyncraticity and match different needs. We believe indeed **that investors should primarily segment allocation to these assets according to a clear understanding of their features, investment objectives and risk sources** [1].

Following this approach, we think assets should be segmented between **yield and growth assets**.

### An outcome oriented angle : Yield versus Growth

Private debt and Infrastructure debt, which offer regular cash-flows over a medium- or long-term horizon, are considered as yield-generating bucket of an investor's allocation. Likewise, Private Equity and Infrastructure Equity are primarily equity asset classes that should be categorized within the Pension fund's growth, or performance-seeking portfolio.

The decision is less straightforward regarding real estate, which both carries a yield component and is highly sensitive to equity beta. A recent study by Norges Bank, a leading sovereign investor, has confirmed that an independent Real estate factor is at play [2]. Some investors nevertheless maintain a distinction between Equity and Fixed income in their portfolio, and in this case Real-estate investments can be represented as a mix of Equities and bonds, with an equity beta that we typically estimate at about 0.4. Even though some investors may have a different perception, we estimate that real estate does not show any significant correlation with nominal bonds while it displays some sensitivity to inflation-linked bonds.

1 For a more detailed discussion on integrating alternative assets in an allocation, please refer to S. de Laguiche and Tazé-Bernard E. in « Allocating alternative assets: why, how and how much », Amundi Discussion paper, November 2014.

2 We also observe that Solvency 2 regulation applying to the insurance sector has identified Real estate as one of the 5 axis for estimating SCR, along with Equity, Interest rates, Credit and Currency.

# ASSET ALLOCATION
## IS LIQUIDITY THE RIGHT « FRONTIER » TO CONSIDER? (2/3)

This observation is particularly applicable to markets, such as the UK, where rents tend to be indexed to inflation, but investors should be aware that there is no homogeneity between the indexation variable on the asset (rents in this case) and liability side (wages).

### Liquidity as a continuum state

Instead of segmenting their portfolio between “liquid” and “illiquid” assets, investors should consider liquidity as a continuum rather than a binary state. Even “illiquid” assets can generally be disposed of in certain circumstances and at a given price, while asset classes that are considered liquid can temporarily be facing liquidity issues. This may actually happen in times of stress which are precisely those when investors want to reduce their exposure to them.

Liquidity features are also very different within the alternative asset class. They are particularly impacted by:

- Each strategy’s specific investment cycle. As an illustration, Private debt liquidity cycles are impacted by the behaviour of LBO funds, which typically have holding periods of 5 to 7 years. Certain alternative assets, such as real estate, infrastructure and private debt, also provide regular partial liquidity in the form of cash distributions.
- The size and direction of investments considered. In a context where banks are trying to get rid of large portfolios of loans, it might paradoxically be easier to purchase private debt holdings for larger amounts than for modest amounts, as liquidity is higher on the buying than on the selling side.
- The notion of liquidity itself depends on, whether you are an investment manager – in which case liquidity is mainly related to portfolio rebalancing and asset sales – or an institutional investor – liability constraints are the dominant factor in this case.

Our recommendation is then to broadly segment liabilities by horizon, and choose assets adapted to each liquidity bucket. As an illustration, the following schematic breakdown can be applied:

- Focus on a strict cash-flow matching approach for the shorter horizon, with a preference for liquid credit securities,
- Start including real assets, such as real estate, infrastructure and private debt, over a medium-term horizon (higher than 5 years) due to their attractive combination of regular yield and significant premium over traditional fixed-income assets
- Select long duration assets, in the form of high-quality nominal and real bonds, as well as equities (including Private equity), for the long-term horizon (above 10 years) over which strict liability matching is no longer necessary. The size and composition of this bucket must be regularly reviewed depending on market trends and changes in the investor’s liability estimates.

As a result, we believe liquidity is one feature to take into account, beyond broad asset classes, while setting up an asset allocation, and investors should make sure that different liquidity buckets on their liability side are matched with assets offering liquidity at similar investment horizons [3]. Alternative assets are fully adapted to this approach.

3 For a discussion on different approaches to Portfolio diversification, please refer to P. Blanqué and Tazé-Bernard E., “The reincarnation of Diversification“, Amundi, August 2015.

### LIQUIDITY FEATURES

- Investors should consider liquidity as a continuum rather than a binary state.
- Private debt liquidity is cyclical.
- The fact that banks get rid of large portfolios of loans eases the purchase of private debt holdings for large than for modest amounts.
- An Investment Manager and institutional investor don’t have the same notion of liquidity.

### HORIZON BREAKDOWN

- **Short term horizon:** strict cash flow matching approach with a preference for liquid credit securities.
- **Medium term horizon:** real estate, infrastructure and private debt.
- **Long term horizon:** high-quality nominal and real bonds, as well as equities (including Private equity).

# ASSET ALLOCATION
# IS LIQUIDITY THE RIGHT « FRONTIER » TO CONSIDER? (3/3)

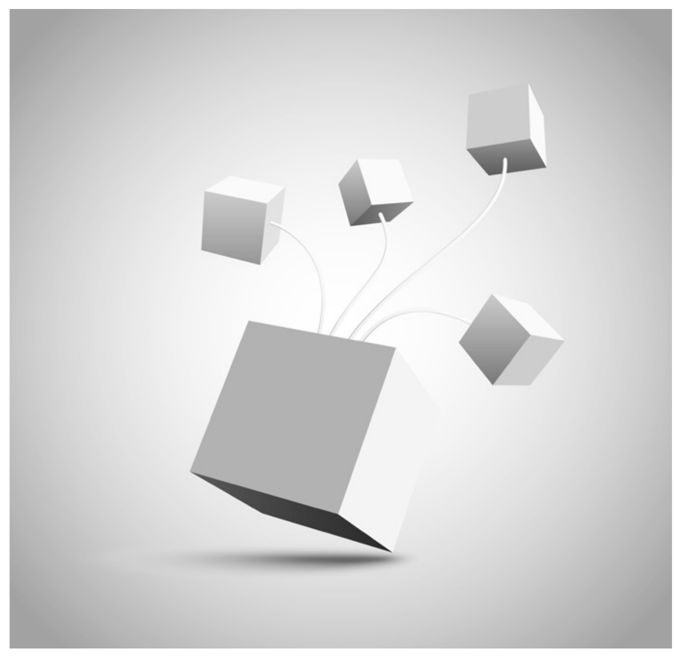
## Specific risks of alternative assets

Investors are well aware that the risk of alternative investments is inadequately reflected by usual indicators such as volatility, due in particular to unusual data and biases in valuation methods. These assets also carry different risk sources than traditional assets, such as:

- **Specific project risk,** in the case of infrastructure debt in particular, encompassing both an industrial risk (delay in the construction of the infrastructure) and a legal one (uncertainty regarding the liability of different partners in the case of such delay or failure).
- **Cash-flow risk,** as the expected cash-flow may in specific circumstances be either delayed or interrupted.
- **Sourcing risk:** the dispersion of returns is particularly high within the universe of alternative investments where the ability to select skilled managers is key to adding value. One key element to generate performance in this field is the capacity to access the most attractive deals, which are often presented to large and well-informed investors.
- **Currency risk:** this type of risk applies to all asset classes, but hedging FX exposure implies full knowledge of the cash flow schedule, which is not so easy when the amortization agenda is not binding or when the distributed coupons or dividends depend on the completion of the project and the income generated by the asset. For predictable payments or repayments, different hedging processes may be used, such as short term FX swap roll over or long-term cross-currency swaps (basis swaps). Nevertheless, the impact of potential cash collateral that the banking counterparty may ask to enter the trade should not be underestimated.

### RISK MAP

- **Volatility risk:** a statistical measure of the dispersion of returns for a given portfolio
- **Specific project risk:** industrial and/or legal risk which could occur during the project
- **Cash flow risk:** delayed or interrupted cash flow
- **Sourcing risk:** high dispersion of returns within the universe of alternative investments
- **Currency risk:** uncertainty concerning the amortization agenda



**As a conclusion,** alternative strategies, such as infrastructure debt and private debt, seem specifically adapted to pension funds' cashflow matching objectives. Notwithstanding the yield pick-up however, there are multiple contractual and implementation complexities associated with investing into these assets, including:

- setting appropriate governance structures
- identifying the sourcing and timing of these opportunities
- understanding, interpreting and defining the contractual engagements
- managing the cash drawdowns to investment and the redemption proceeds

# PORFOLIO CONSTRUCTION:
# HOW APPROACHING FACTOR INVESTING?

**BRUNO TAILLARDAT**
Head of Smart Beta

## How to best capture risk premia and use factor solutions when considering portfolio construction?

Lower economic growth is curbing the medium-term return potential of equities while bouts of volatility threaten to erode the value of the portfolio. In this challenging environment, investors are increasingly looking for a new approach to equity investing while managing risks. Factor investing solutions can answer these needs, as they enable investors to capture rewarded risks and thus improve diversification compared with market capitalisation-weighted indices.

## Characteristics of factor investing

An investor can access a more diversified exposure to stocks and shares using index construction techniques which take a more risk balanced approach. This could include building an index by equalising the risk contribution of individual stocks, minimising volatility or maximising a diversification measure.

However, a better risk-return profile can be achieved by tilting a portfolio towards stocks with specific features, in comparison with traditional strategies. Academic research has shown stocks with specific characteristics can have consistent and persistent risk premia, which are known as investment factors. Well-known factors include size, value, momentum, low volatility, quality and dividends.

## Improving the return profile of an investment factor portfolio

These investment factors can produce significant performance compared to market-cap weighted indices by capturing the equity risk premium as well as the additional risk premia associated with these investment factors. Some factors can also reduce the volatility of the equity portfolio, particularly the quality and minimum volatility factors. By including these defensive factors in the portfolio tilt, investors can somewhat mitigate the risk profile of their portfolio.

The portfolio diversification can be increased by adding more than one factor into the portfolio. Investors can also reduce the frequency and likelihood of underperformance by an exposure to a broad set of factors which can improve the ability of the portfolio to generate alpha, irrespective of the economic cycle. This exposure to different factors can be managed dynamically, according to the economic cycle and market stress phases in order to generate significant returns, compared to a portfolio with a static investment factor allocation [1].

## Risk customisation

Instead of simply taking the straightforward approach of allocation risk equally to each investment factor, the investor can decide to allocate weighting in line with a specific portfolio risk, which could be an absolute target or one relative to a market-cap weighted index.

Some alternative portfolio weighting approaches such as risk parity, low volatility or maximum decorrelation would lead to a more balanced risk factor of the portfolio.

### THE SIX EQUITY FACTORS

- **Value** – these stocks have low prices relative to their fundamental valuation but outperform higher valued stocks over time.
- **Size (small cap)** – smaller companies generate higher returns over time than their larger cap cousins.
- **Momentum** – stocks which performed well in the past will continue to outperform those which did not. Looking at the relative performance of stocks over different time periods highlights those with this factor.
- **Low volatility** – shares with lower historical volatility will perform better than their more volatile counterparts over time.
- **Dividend** – those stocks with high and sustainable dividends outperform those with lower dividends.
- **Quality** – companies with low debt and stable earnings growth outperform lower quality companies.

1 Source: Amundi Smart Beta Academy

# **SPECIFIC REPORTS:** KEEPING INFORMED OF CHANGES IN THE PENSION INDUSTRY LANDSCAPE

## EUROPEAN PENSION FUND SURVEY 2017

We are pleased to work again with **Amin Rajan** from Create Research to bring you valuable insights for the pensions industry in a post Brexit Environment. The whole document is downloadable **here**.

### Expecting the unexpected or how pension plans are adapting to a post-Brexit world

The need for innovation and new methods of finding return is more important now than ever. After eight years of a low yield environment and market uncertainty, many are realising that traditional asset allocation models may no longer be appropriate. This uncertainty has increasingly become the norm and with major headwinds such as Brexit looming large, it is not expected to end in the near future.

Created specifically for pension providers but appropriate for all large institutional investors, this report based on a survey of 169 pension plans across Europe goes into detail on the factors that are influencing return and the drivers of innovation in both investment strategies and asset allocation modelling. It explores topics such as the use of consultants in developing mandates, the increasing importance of ESG strategies and the use of ETFs in portfolios. The report also has several case studies providing an insider view on how your peers across the European pension marketplace are approaching innovation from various perspectives. We hope you find this report both informative and useful in helping you meet your investment goals.

**Investment innovations that delivered most value since the 2008 crisis: their current adoption and future growth**

% of adopters reporting an impact

| | Delivered least value | Delivered most value | Current adoption rate | Future growth |
|---|---|---|---|---|
| **ASSET CLASSES** | | | | |
| Private debt | 13 | 61 | 52 | High |
| Low-carbon strategies | 12 | 35 | 32 | High |
| Wind farms | 20 | 32 | 32 | High |
| **PRODUCT THEMES** | | | | |
| Global growth | 16 | 36 | 42 | High |
| Bank restructuring | 18 | 35 | 39 | High |
| ESG | 12 | 33 | 37 | Medium |
| **ASSET ALLOCATION TOOLS** | | | | |
| Risk factor based investing | 16 | 51 | 51 | High |
| Absolute return investing | 36 | 47 | 68 | High |
| Dynamic investing | 13 | 40 | 45 | Medium |
| **ASSET VEHICLES** | | | | |
| Multi-asset class funds | 13 | 45 | 29 | High |
| Exchange traded funds (ETFs) | 21 | 42 | 35 | High |
| Smart beta funds | 24 | 40 | 32 | High |

Source: Amundi Asset Management / CREATE-Research Survey 2016

## IORP 2 : KEEPING UP WITH REGULATORY CHANGES IN EUROPE

Recently, the regulatory framework for pension in Europe has significantly changed. **Marie Brière**, the Head of Investor Research Center at AMUNDI AM is glad to provide you with a report which deals with the key changes which are supposed to impact the pension industry. The whole document is downloadable **here**.

### A New Regulatory Framework For Pension

On June 30th 2016, the European Commission agreed upon a revised directive for Institutions for Occupational Retirement Provision (IORP). The European Commission's effort to harmonize IORP regulation began in 2012 with a proposal that is modeled after the Solvency II regulation for insurers. IORPs sustained opposition to risk-based quantitative requirements has led to a final Directive that eliminates solvency regulation, and focuses on governance, communication, long-term and socially responsible investment. The European Commission published in March 2014 a draft of the IORP2 Directive.

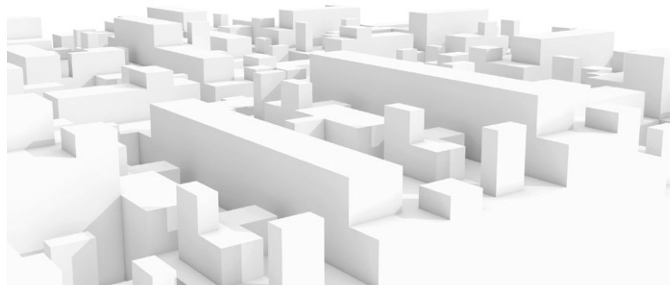
The 81-article proposal has four key objectives:

**I.** ensure the soundness of occupational pensions and better protect pension scheme members and beneficiaries,

**II.** better inform members and beneficiaries,

**III.** remove obstacles to cross-border provision of services,

**IV.** encourage funds to invest for the long run in growth, environment and employment-enhancing economic activities by modernizing investment rules.



# **TO GO FURTHER:** AMUNDI'S RESEARCH CENTER

## Research center

**Amundi's independent research platform boasts 126 international experts who support both domestic and international investment teams. Covering the main aspects of investment research, our in-house experts seek to anticipate and innovate to the benefit of both investment teams and clients alike. For more information on the above documents and download them please visit our website here.**

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