For professional investors – Marketing communication – May 2023

PRACTICAL APPLICATIONS - DIVERSIFIED PRIVATE ASSETS

BNP PARIBAS ASSET MANAGEMENT

The sustainable investor for a changing world

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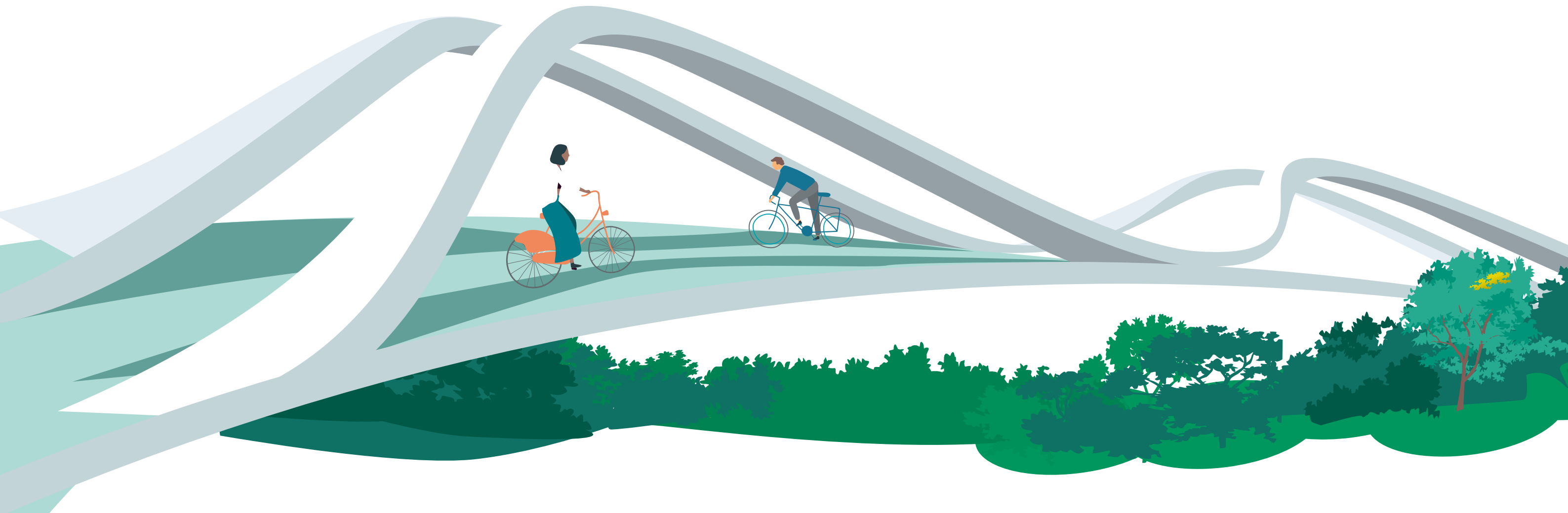

1. AN INTRODUCTION TO PRIVATE ASSETS

Private Assets have become an indispensable tool for institutional investors providing higher yielding assets to better match liabilities and total return solutions to improve portfolio characteristics. To facilitate efficient and cost effective access to these specialist asset classes, diversified multi-asset solutions have developed that demonstrate clear advantages over traditional investment mechanisms. They also provide investors with the ability to create portfolios aligned to the age of transformation in the real economy.

From a strategic perspective, private assets offer investors access to a diverse array of investment opportunities encompassing private equity, venture capital, real estate, infrastructure, natural resources and private credit.

- Relative to public market equity investments private equity e.g. infrastructure equity can have income and return streams that are contractual in nature offering lower volatility than listed equivalents.
- Equally private credit offers an illiquidity (and/or complexity) premia relative to and typically has lower default rates than equivalently rated public alternatives.

At BNP Paribas Asset Management (BNPP AM), we are able to offer investors a broad blend of underlying private market and real asset exposure, a unique dual proprietary origination model and co-investment opportunities with the BNP Paribas Group.

From a tactical perspective, private assets also have attractive characteristics that can help investors build resilience into their portfolios. For example, as inflationary concerns have re-emerged, private credit can partially offset inflation through the underlying contractual nature of returns (often linked to inflation). Additionally, private credit can often be floating rate in nature, thereby limiting the duration risk otherwise inherent in traditional fixed income products.

Since 2018, BNPP AM has been promoting diversified private asset strategies as a one-stop-shop solution. Relative to making investments in multiple standalone singular asset class structures, diversified solution benefits are as follows:

- A lower governance burden with regard to monitoring managers and managing cash-flows.
- Increased diversification; by asset class, geography, currency, sector, liquidity and credit rating.
- Efficient cash and FX collateral management.
- Closed-ended and open-ended, evergreen solutions available.
- Active asset allocation on a relative value basis both during the investment period and ongoing with the re-investment of principal repayments, coupons and contributions.
- Better and customised cash-flow matching characteristics for clients seeking to meet ongoing liabilities.

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Prior to that Julien worked for Goldman Sachs, Aon, P-Solve and Lazard. With investment banking and consulting experience stretching over 26 years Julien has spent over 15 years advising institutional clients on structuring and implementing pensions and insurance solutions for national and cross-border clients.

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Philip is Head of Sales (UK & Ireland) at BNP Paribas AM having joined in November 2017 from Allianz Global investors where he spent 16 years working with institutional clients. During his time with the Allianz Group, Philip was involved in the creation of a number of new products across multi-asset, listed and private assets, including the launch of the first UK fund to facilitate primary greenfield transactions in infrastructure debt for institutional investors.

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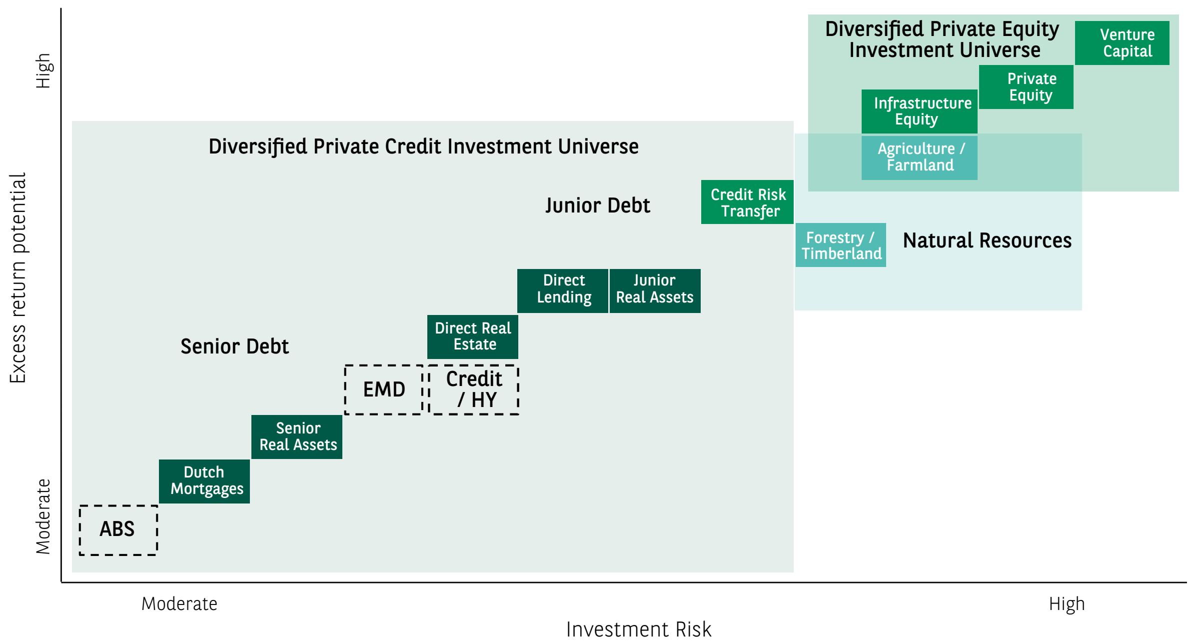
2. THE VALUE OF DIVERSIFIED PRIVATE ASSETS

WHAT DOES THE DIVERSIFIED PRIVATE ASSETS INVESTMENT UNIVERSE LOOK LIKE?

Diversified private asset portfolios allow institutional investors to access a broad range of asset classes: from private credit assets that would traditionally have been the preserve of banks to natural resources and private equity. According to Preqin's 2022 Global Private Debt report, alternative assets under management across private equity, private debt, hedge funds, real estate, infrastructure and natural resources exceeded $13trn in 2021.

An overview of the diversified private assets investment universe



Source: BNPP AM, August 2022. For illustrative purposes only. Past performance is not an indication of future performance.

WHAT ARE TYPICAL DIVERSIFIED PRIVATE CREDIT ASSETS?

The universe of private credit assets available to pension schemes has expanded rapidly over the past decade. More stringent capital requirements on banks has seen the disintermediation of traditional financing models by asset managers and institutional investors across a broad range of asset classes such as:

- Infrastructure debt
- Commercial real estate debt
- Mid-market loans
- Asset backed securities
- Mortgage backed securities

Encompassing direct lending to infrastructure, real estate projects and corporate entities such exposures can dampen portfolio volatility and enhance the overall risk/return profile of portfolios. In creating a portfolio of secure income generating assets, diversification is of critical importance. Often idiosyncratic in nature, the underlying asset classes diversify well against each other and traditional liquid components of institutional portfolios, minimising tail risks. In addition, as spreads are cyclical in nature a dynamic approach to asset allocation can help pension schemes find relative value in the market over time.

A holistic multi-asset approach with active asset allocation minimises timing risks and reduces the potential for opportunity costs that can affect traditional static allocations. For small and mid-sized Defined Benefit (DB) schemes or default Defined Contribution (DC) plans that may lack the scale and/or governance budget to make allocations to multiple, singular asset classes, a diversified private credit approach is an efficient means of exploiting private assets as an alternative to traditional fixed income assets.

Diversified private credit can be used as total return growth fixed income alternatives or as formal Cash-flow Driven Investing (CDI) assets to generate secure income in order to meet long-term liabilities. One might reasonably expect a CDI portfolio to have a higher allocation to senior private credit due to the security that they offer and total return seeking portfolios to incorporate more direct lending and junior/mezzanine transactions.

THE BENEFITS OF A PRIVATE CREDIT APPROACH

At BNPP AM, we believe a portfolio of secure private credit and real assets provides investors with a better match of liabilities as well as other tangible benefits that liquid strategies do not. The incremental benefits of a private credit approach can be summarised as follows:

- Excess returns above gilts and investment grade credit (i.e. the illiquidity premium)
- Long-term cash-flows backed by high quality collateral
- Inflation linkage
- Highly covenanted, secure income streams
- Reduced market exposure (compared to listed securities)
- Lower default rates
- Improved overall portfolio risk-adjusted returns

INCORPORATING HIGHER RETURN SEEKING PRIVATE ASSETS

Particularly relevant for DC default schemes looking to generate long-term total return for members during the accumulation phase, returns can be enhanced by including within the strategic asset allocation higher yielding (private) assets such as:

- Forestry
- Agriculture
- Credit risk transfers
- Infrastructure equity
- Private equity
- Venture capital
- Special situations.

Whilst allocations to return-seeking asset classes can improve overall portfolio returns, it is also increasingly possible to be discerning with respect to ESG (Environmental, Social and Governance) and climate change characteristics. Renewable infrastructure equity is an obvious example but venture capital can provide access to nascent and emerging "clean" technologies (such as carbon capture, hydrogen, EV, low carbon manufacturing technologies, agri-food and circular economy and ocean developments). Similarly, including natural resources such as forestry and farmland enables clients to incorporate carbon sinks into their portfolios, in both cases going beyond existing net zero carbon reduction commitments.

As with the energy transition, there are also secular arguments underpinning the rationale for investments in farmland and associated agri-technologies. According to the United Nations (UN), by 2050 it is anticipated that agriculture will have to sustain a global population in excess of 9.7 billion, requiring enhanced productivity and associated investment. Similar to other private market asset classes, agriculture can offer both low correlation to other assets and inflation hedging in a diversified portfolio. Forestry has likewise proved to be an attractive long-term alternative asset allowing for secure income streams from harvested timber, diversification through uncorrelated returns, inflation protection, reduced volatility and the ability to incorporate carbon sequestration.

3. OUR APPROACH TO PRIVATE ASSETS

BNPP AM's approach to Diversified Private Assets relies on specialist investment teams to access the underlying asset classes, namely Global Loans, European Mid-Market Loans, US Mid-Market Lending, Structured Finance, Infrastructure Debt, Commercial Real Estate Debt, Dutch Mortgages, Real Estate, Credit Risk Transfer, Forestry, Agriculture, Venture Capital and Private Equity. Investments can be made through funds or through single line transactions, utilising BNPP Group's own asset management teams or through external managers.

Each team benefits from established track-records in the technical under-writing of private debt and equity investments with established networks of project sponsors offering sustainable origination, supplemented by proprietary BNP Paribas Group origination partners.

EXPERIENCE IS EVERYTHING

BNP Paribas Group has been financing the real economy for 150 years with market leading positions in real estate and infrastructure financing. For both the Group and BNPP AM, our goal is to provide quality investment solutions for our clients, building strong, lasting relationships based on confidence and trust. Within private markets and real assets this confidence and trust helps support origination as our specialist investment teams have a reputation for rigour, scale and execution.

ONE-STOP-SHOP

Deal sourcing: BNPP AM's Diversified Private Assets strategy leverages the specialist investment teams that comprise the Private Assets investment division with over 100 investment professionals. The division is comprised origination teams focused on corporate lending, infrastructure and real estate debt across the globe as well as investment teams in other parts of the BNPP Group (Cardif, Real Estate Investment Management and Private Wealth Management).

Portfolio structuring flexibility: Diversified Private Credit and Diversified Private Asset solutions need not necessarily be created as fund-of-fund portfolios but can also rely on direct, line-by-line investments. This is especially the case when sophisticated investment strategies are required (for example, when meeting liability cash flows, liquidity or ESG/climate alignment requirements).

Active diversified portfolio management: Whilst private assets are generally less liquid than listed ones, we believe active portfolio management significantly mitigates the associated risks. Across asset classes, a focus on diversification and strict risk assessment offers institutional investors access to high quality assets and co-investment opportunities that deliver long-term performance. In particular, strategically scheduling and reinvesting coupons and redemptions across asset classes and investments can prove crucial for many institutional investors.

Leveraging the Group (I): BNPP AM has privileged access to the origination capabilities of the wider BNP Paribas Group. Considering that the BNP Paribas Group is the largest banking group in Europe and the seventh globally, this access opens up multiple opportunities and provides investors with increased comfort on the quality and depth of private market asset supply.

Leveraging the Group (II): Our one-stop-shop solution also includes BNP Paribas Security Services, the Group's global custodian provider with a global reach covering 90+ markets that offers depository, loan and fund administration services. These services enable BNPP AM to establish individual mandates and if needed create bespoke fund-of-one solutions.

Leveraging the Group (III): In addition, the BNP Paribas Group is able to utilise its balance sheet to provide strategic risk transfers, co-investments, liquidity mechanisms and structuring/securitisation vehicles.

4. ESG AND CLIMATE ALIGNMENT

In recent years, listed markets have seen a surge in ESG strategies, impacting equity and fixed income portfolios. The availability of ESG data helped to make that possible. Many ESG indices were launched followed by numerous ESG Exchange Traded Funds (ETFs) garnering ever-growing assets under management.

Private markets follow a comparable trend as integrating extra financial information is becoming increasingly critical to relevant asset valuation. These asset classes, however, do not benefit from the same flow of ESG information and accessing data remains a challenge. As a result, the assessment and management of ESG risks and opportunities are painstaking and require strong expertise. The effort is worthwhile as private markets offer strong levers to address sustainability and to favour positive environmental and social impacts in a way that public markets often cannot.

AN ASSET CLASS WITH A STRONG POTENTIAL FOR IMPACT

Private asset classes may allow for multiple interactions with investees. The access to information and the implementation of more sustainable practices or impactful solutions can be directly discussed and agreed between participants. The investments made in projects or private companies are easier to link to sustainable or impact goals sought by the investor. It is also possible to examine private market asset classes with their potential to match the United Nations' Sustainable Development Goals (UN SDGs), which in turn allows investors to create impactful portfolios with clearly defined societal benefits e.g. climate aligned portfolios.

Source: United Nations

Investing in private assets is a pertinent proposition to contribute positively to environmental and social objectives for the following reasons:

The financing of the real economy: Private markets are essential to stimulating the real economy:
- **Through innovation:** The perfect solutions to current problems do not always exist, this is why it is essential to finance alternative ways of addressing them. Private assets enable investments in innovative solutions, in particular through venture capital (such as green hydrogen, energy storage or carbon capture in the case of climate change) to help resolve the finance gap on climate mitigation.
- **By contributing to systemic change:** Important social and environmental changes –such as the transition to a low carbon economy- need to reach every corner of the economy. Changes do not only need to happen in all companies -large and small- but also with respect to the infrastructure and buildings essential to support the energy transition: from energy efficiency and clean energy production to storage and clean mobility. Private assets are therefore indispensable to finance the transition to a more sustainable world. In the case of climate change mitigation, $4 trillion is needed per annum if we want the world to reach carbon neutrality by 2050, as estimated by the International Energy Agency.

A closer relationship with investees: Depending on the asset class, private markets can often provide for more proximity with investees, enabling long-term exchanges and collaboration. Pre-investment discussions can facilitate alignment of views and give the opportunity to share advice. Upon investment, ESG and impact commitments can be formalised directly in contractual documents at the transactional level i.e. financing can be predicated on key ESG criteria. Post-investment, engagement with investees helps monitor these and thus improve practices and outcomes.

A longer term approach: Due to the long term nature of their investments, private asset investors accompany investees in critical phases of their development, and are particularly relevant in supporting them in the achievement of their sustainability and impact goals.

BNPP ASSET MANAGEMENT'S ESG INTEGRATION CAPABILITY

Depending on the specificities of each asset class which can range from debt to equity to real assets, ESG integration is addressed from different perspectives. Below is a sample of what is possible within BNPP AM:

- **Exclusions:** An initial ESG filter is applied to exclude projects when sponsors are not aligned with either the clients or BNP Paribas AM's Responsible Business Conduct policies, under which we commit not to finance entities that violate the UN Global Compact as well as in-house specific policies for sensitive sectors.
- **Selection of sustainable and/or impactful assets:** From the outset, investment teams select assets which are aligned with a strategy's pre-defined criteria, be they social or environmental. The definition and implementation of a specific taxonomy for each asset class makes it possible to refine the ESG analysis from a qualitative perspective specific to each of them.
- **ESG analysis:** A thorough Environmental, Social and Governance analysis is performed to assess extra-financial risks and opportunities specific to each asset. This enables, in particular, investors to complete the "do not know significant harm" analysis required by regulation.
- **Impact assessment:** In addition to the proprietary ESG analysis conducted by the Global Sustainability Centre on real assets transactions, third party providers are also utilised to align, measure and report on key environmental and climate outcomes. As a result, for infrastructure and commercial real estate transactions for example, BNPP AM requires the external assessment of carbon footprint, induced emissions, avoided emissions, alignment with the 2 Degree C scenario and the calculation of the Net Environmental Contribution, all of which are taken into account in investment decisions.
- **Independent validation:** the Global Sustainability Centre retains a veto right over transactions at the investment committee stage to ensure full compliance with BNPP AM's policies and procedures.
- **Engagement:** Pre-investment discussions with investees may result in the inclusion of specific requirements in contractual documentation.
- **Regular reporting:** monitoring of the relevant financial and extra financial Key Performance Indicators (KPIs).

Following this rigorous process and in recognition of this several of BNPP AM's private asset strategies have been classified as Article 8 under the European Union's Sustainable Finance Disclosure Regulations (SFDR). An Article 8 investment under SFDR is defined as a product which "promotes, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices."

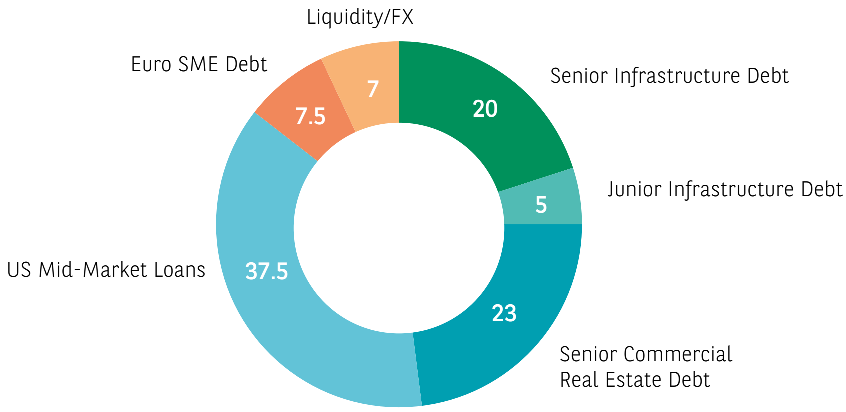
Moreover, as highlighted, investments in many of the underlying asset classes, such as infrastructure debt, have a tangible effect on the real economy providing additional societal benefits and include positive impact as evidenced by their potential to contribute to the UN SDGs. From a regulatory perspective, SFDR Article 9 covers products that have "sustainable investment" as their objective. "Sustainable investment" being defined as an economic activity that contributes to an environmental or social objective. BNPP AM's Climate Impact strategy for example is an Article 9 SFDR initiative aligned with the EU Taxonomy with regard to environmental added value across renewable energy, energy efficiency, clean transportation, utilities (such as waste management, water management, etc.), or green buildings. It invests in such assets that enable BNPP AM to create climate aligned diversified private asset portfolios.

Detailed and specific needs can therefore be considered when designing bespoke diversified private asset solutions that reflect the complex and multi-faceted nature of our investors' sustainability requirements. This can be done through fund of fund structures, or through line by line transactions.

5. PRACTICAL IMPLEMENTATION EXAMPLES

1. DIVERSIFIED PRIVATE CREDIT - EVERGREEN TOTAL RETURN

Diversified Private Credit - Strategic Asset Allocation



Source: For illustrative purposes only. BNPP AM – June 2022.

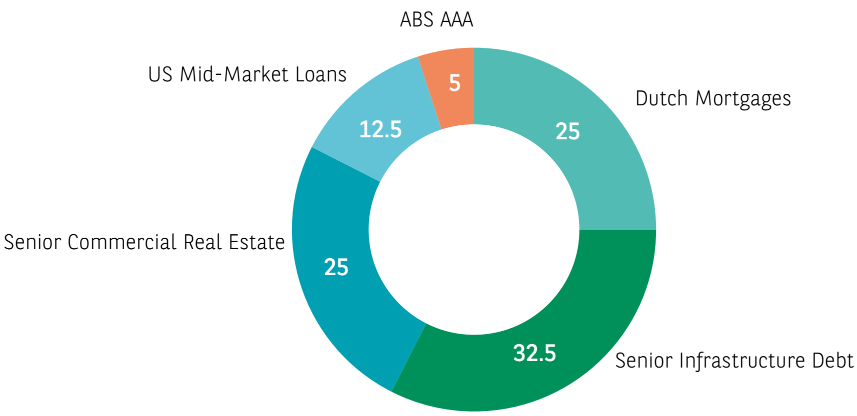
Governance arrangements through a formal investment committee ensure the ongoing suitability of the strategy for underlying members and as a component of the default. These arrangements also future-proof the strategy against opportunity costs since new asset classes can be introduced to the strategic asset allocation as opportunities arise.

BNPP AM's approach can meet the requirements of very different investors, be they institutional or retail. For example, liquidity that is a key concern for DC pension schemes both operationally (through the investment platforms that schemes utilise to facilitate investments) and in order to accommodate contributions and redemptions, has led to the structuring of credit lines with the BNP Paribas Group. Other mechanisms can be embedded into product design to facilitate liquidity (such as listed instruments) but ultimately it is by exploiting the risk premia attached to illiquid assets that the maximum benefits can be derived.

2. DIVERSIFIED PRIVATE CREDIT – EVERGREEN CASH FLOW MATCHING

In 2019, BNPP AM developed an evergreen, open-ended Diversified Private Credit solution for a multi-national client seeking to generate income from private credit to match their long-term liabilities (multi-currency). Implemented as an alternative to traditional fixed income assets a portfolio of secure (largely investment grade) assets was created incorporating Dutch mortgages, senior infrastructure and commercial real estate debt, US mid-market loans and AAA ABS.

Diversified Private Credit (CDI) - Strategic Asset Allocation



Source: For illustrative purposes only. BNPP AM – June 2022

Cash-flow driven investing portfolios in the context of DB pension schemes are designed as a partial alternative (or complement) to existing Liability Driven Investment (LDI) strategies. As with DC pension schemes, concern has also been raised over the tenor of such portfolios given funding level improvements and anticipated future expectations of buy-outs. These concerns may be over-stated as the high quality, secure, income-generating assets that comprise CDI portfolios are also highly sought after by the very same insurance companies with whom DB schemes seek such transactions.

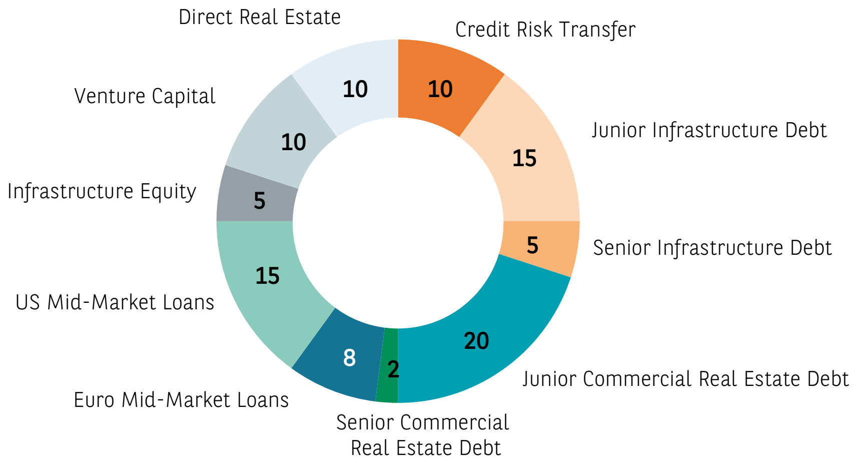
In any event, as with DC pension schemes, mechanisms can be incorporated into portfolios that limit these potential concerns, such as:

- Focusing the strategic asset allocation on assets with a weighted average life of < 10-years.
- Creating customised closed-ended structures that amortise over time.
- Incorporating 'sweep' mechanisms into fund structures that seek secondary buyers for the portfolio tail once >75% of assets have amortised.
- Incorporate formal liquidity mechanisms to take assets back onto the BNP Paribas balance sheet.
- Facilitate the secondary market disposal of assets.
- Ensure underlying transactions comply with buy-out provider requirements (usually focused on valuation and rating methodologies as illiquidity is per se rarely an issue but pricing always is).

3. CLIMATE ALIGNED PRIVATE ASSETS SOLUTION

Many institutional investors have been constrained within the higher returning segment of the climate-aligned private assets investment universe due to the higher fees that are typically charged. Within a diversified private assets solution however, portfolios can be optimised using fees as a constraint, to include allocations to these asset classes. BNPP AM has developed an evergreen climate aligned diversified private assets solution that targets a Cash + 6% return from a broad range of ESG compliant underlying asset classes.

Climate Aligned Diversified Private Assets (Cash + 6.0%)



Source: For illustrative purposes only. BNPP AM – June 2022

6. WHY BNP PARIBAS ASSET MANAGEMENT FOR DIVERSIFIED PRIVATE MARKETS

1.

ACCESS TO SPECIALIST PRIVATE CREDIT AND REAL ASSETS TEAMS AND AN ORIGINATION POWER-HOUSE

BNPP AM's Diversified Private Credit (DPC) and Diversified Private Assets (DPA) capability offers institutional investors access to a broad range of private credit and real assets capabilities from within BNPP AM. Leveraging over 100 investment professionals located in the UK, Europe and the US. BNPP AM teams also have proprietary access to the market-leading origination capabilities of BNP Paribas.

2.

CUSTOMISED IMPLEMENTATION AND GOVERNANCE

BNPP AM is able to create bespoke solutions for institutional clients. Design, dynamic implementation, active asset allocation, cash-management, governance and reporting is overseen by a dedicated team of 130 multi-asset, quantitative and solutions investment professionals. From product design to the structuring of vehicles BNPP AM is able to offer bespoke cash-flow matching, income oriented or total return closed and open-ended, evergreen fund solutions.

3.

ONE-STOP-SHOP SUPPORTED BY AN A-RATED BANK INFRASTRUCTURE

BNPP AM is supported by the infrastructure and resources of our parent BNP Paribas. This includes solutions in capital markets such as debt origination and FX hedging, liquidity provision and dedicated fund servicing such as custody and loan administration.

4.

BENEFITTING FROM THE BANK'S BALANCE SHEET

In instances where the BNP Paribas Group originates underlying loans for clients a proportion is retained within its balance sheet creating an alignment of interest between third-party investors and the Group. Periodically strategic clients may also benefit from strategic risk transfers that enable both rapid deployment of capital and in some instances the provision of liquidity.

5.

IMPACT WITH ESG EMBEDDED WITHIN THE INVESTMENT PROCESS

BNP Paribas Group has been financing the real economy for 150 years with market leading positions in real estate and infrastructure financing. BNPP AM is able to offer clients access to underlying private markets strategies that have ESG fully embedded in their respective investment processes. Increasingly BNPP AM is also able to offer clients access to impact and climate aligned strategies that enable investors to align their portfolios to UN SDGs and with their own sustainability policies.

6.

GOVERNANCE AND FLEXIBILITY

Diversified private asset solutions offer clients a lower governance burden than traditional closed-ended fund solutions. In addition the creation of investor-led (trustees, sponsors and advisors) investment committees enable the continued assessment of suitability and for the rapid inclusion of emerging asset classes and investment opportunities as they arise, thereby lowering the opportunity cost associated with less flexible approaches.

DPC portfolio risk: Because of the inherent complexity of such a strategy and the lack of liquidity of some DPC assets, a DPC portfolio may not always deliver the expected cash flows. Basis risk: By nature, there is a difference between pension liability cash flows and DPC assets. It is important to keep this aspect in mind when structuring a DPC portfolio in order to minimize basis risk. Governance risks: Given the multiple DPC asset classes and the potentially long ramp up period, the required level of governance is quite high and can involve performance, risk, trigger and exposure monitoring as well as the use of synthetic DPC assets. Assessment of relative value between synthetic proxies and real assets may also need some governance. Not providing the appropriate level of control and governance could negatively impact the long-term performance of the DPC strategy.

VIEWPOINT

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ASSET MANAGEMENT

The sustainable investor for a changing world