

# IDEAS FIXED INCOME /// 15 DECEMBER 2016

## Real Asset Debt for Institutional Investors

### HIGHLIGHTS

- Real asset debt can be seen as a distinct asset class in its own right. The assets in this asset class have a number of common characteristics, including regular, secure cash flows and an attractive risk-adjusted return on capital.
- The maturities of this asset class are particularly interesting for insurers and pension funds for whom it is prudent to back their long-dated liabilities with long-maturity assets.

Banks have been making loans to finance real assets since they exist. But in the last few years, institutional investors have been picking up a share of this market for themselves, either directly or, more often, via managed debt funds.

Today, “real asset debt” can be defined as debt which is generally issued by a special purpose vehicle to finance the purchase or construction and operation of real assets such as infrastructure, real estate and aircraft.

In France, the first real estate debt funds emerged in 2005 and the first infrastructure funds in 2013. The first European aircraft debt fund was created in 2014. The same developments are occurring in the US.

In this latest edition of “Ideas”, we take a closer look at some of the characteristics of the real asset debt market, what makes it attractive to institutional investors and some of the differences between the three types of real asset debt.

### Market Context

The real asset debt market is already significant, and continues to grow. For European commercial **real estate debt** (including offices, retail outlets, hotels, student housing and senior housing), €130 billion worth of new transactions are being entered into each year<sup>1</sup>. The **infrastructure** market, which covers such things as roads, railways, airports, wind farms, solar farms and electricity and gas distribution, is \$250 billion globally<sup>2</sup> and 800 new infrastructure transactions are being issued each year.<sup>2</sup> It has

<sup>1</sup> CBRE, PDI, Cushman & Wakefield

<sup>2</sup> Infrastructure Journal

been estimated that \$49 trillion will need to be invested globally in infrastructure by 2030, both to maintain current and to build new assets<sup>3</sup>. Each year, the amount needed to finance new **aircraft** is \$127 billion globally. This figure is growing fast – it is expected to reach \$172 billion by 2020<sup>4</sup>.

The majority of the market is still held by the banks. However, as a result of the financial crisis and the introduction of Basel III, institutional investors and debt funds have made significant inroads. For real estate debt, 20-30% of the market is held outside the banks, and for infrastructure debt the figure is 10-20%. This movement has been supported on an institutional level in Europe, with the adoption of the European Long Term Investment Funds (ELTIF) Directive, creating a recognisable label for long-term funds such as real asset funds, and allowing loan funds to lend directly to the borrower, instead of having to purchase existing loans from a bank lender, as is currently the case. Aircraft debt is the exception: it is still almost exclusively financed by the banks.

### Characteristics

Real asset debt is seen as a distinct asset class not only because the assets financed are similar, but also because of the way the financing is structured. The debt, which is generally **floating rate**, is almost always issued by a vehicle that has been set up specifically for that purpose and is **secured** by the assets and/or the contracts entered into by the vehicle. The **cash flows** tend to be stable and highly predictable, because of the long-term underlying

<sup>3</sup> Bridging Global Infrastructure Gaps, June 2016 McKinsey & Company

<sup>4</sup> Current Aircraft Finance Market Outlook 2016, Boeing Capital Corporation



contracts that generate the SPV's revenues: a government agrees to pay rent for a hospital or a prison for a period of 20 years, for example. The principle is the same for real estate or for aircraft, where the lessee agrees to pay a certain rent for a particular defined period.

In the absence of a sound secondary market where real asset loans can be bought and sold without any particular friction, no mark-to-market prices are available for valuing this type of asset. Besides, the illiquidity of this type of debt means that only limited information can be gleaned from market prices, if they exist. As a result, a mark-to-model approach is used to value loans, to conduct historical backtests and to calculate certain risk indicators. Spreads for real asset debt indicate that an illiquidity premium can be isolated after controlling for default risk. However, the magnitude of the illiquidity premium is closely related to the valuation of the debt, which is often calculated on the basis of certain assumptions underlying the model.

## Return and Credit Risk

Why are institutional investors focussing on this asset class? Insurers and pensions funds in particular like the long-maturity assets which match their long-dated liabilities. But these assets also represent an interesting source of return in a low interest rate environment.

The spreads for senior real asset debt vary between 100 and 300 basis points. For junior debt, the range is from 400 to 700 basis points. Whilst the absolute level of these spreads is comparable to those on corporate debt, once the risk and the cost of capital are taken into account, the spreads for real asset debt look far more appealing. For certain real asset debts, **default rates** are lower than for corporate debt. This is because real asset debt is financed by long-term, stable contracts and the loan contract includes detailed covenants which are regularly monitored. If there is a default, the comprehensive security package ensures that average **recovery rates** are high. To take some examples:

- average default rates on infrastructure debt worldwide, even during the crisis, were less than 1%<sup>5</sup>;
- the average recovery rate for infrastructure debt during the crisis was 78%;
- the probability of default of commercial real estate debt globally across Europe can be roughly estimated at less than 2%, and the recovery rate greater than 90%;

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<sup>5</sup> Moody's Default and Recovery Rates for Project Finance Bank Loans Study 17 March 2016; Moody's Annual Default Study: Corporate Default and Recovery Rates 1920-2014, 4 March 2015

- default rates on aircraft loans are in line with those of corporate debt. However, recovery rates are high, because aircraft is easily repossessed and sold. The average recovery rate for historical senior aircraft secured loans (period 2000-2013) was 92.2%<sup>6</sup>.

In other words, across this asset class the **expected loss** is generally low. This, combined with a favourable **capital treatment** for European insurers, gives a very attractive risk-adjusted rate of return on capital. Some examples of risk-adjusted returns are set out in the section "Cost of Capital" below.

## Diversification and Risks

**Diversification** Real asset debt represents a true source of diversification. Firstly, at the allocation level, real asset debt is a new asset class for institutional investors. Secondly, at the borrower level, each borrower is a new vehicle created specifically for each transaction, so the risk on a particular borrower is limited to the risk for that transaction. In addition, the credit profile of infrastructure debt in particular is very different from that of corporate debt.

**Risk Mitigation** There are, however, certain specific risks in this asset class. These risks are well-known, as are the techniques for mitigating them. As with any secured asset, there is a legal risk that the security package may not be fully enforceable. This should not be a problem if competent lawyers in the relevant jurisdiction have drafted the documentation. There is always a risk of the asset being destroyed, in particular for aircraft. Insurance against such a loss is a fundamental element of the security package. Construction risk particularly impacts investments in infrastructure, but is mitigated by an appropriate allocation of risk between the public authority, if any, the construction company and the equity holders. Political risk, including such things as social unrest, a nationalisation of the asset or currency issues, is a real concern, but can be mitigated by the presence in the financing of the credit export agencies, multilateral agencies and insurance policies.

**Exchange Rate Risk** Aircraft debt is almost exclusively issued in USD, and infrastructure and real estate debt can be issued in any number of currencies. For assets with long maturities, not hedging the exchange rate risk can turn out to be extremely expensive in the long term. It is also risky to hedge the exchange rate risk on loans for the entire term, as loans can be renegotiated or reimbursed before the maturity date at the borrower's initiative, exposing investors to the mark-to-market value of the hedge. However, entering into periodic forwards covering both the principal and the coupon is an efficient hedging strategy which is not particularly costly.

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<sup>6</sup> Regulatory Capital Treatment of Aircraft Backed Loans: Basel Data Exercise, Vadim Linestky, Ph.D., 14 October 2016

## Cost of Capital<sup>7</sup>

**Solvency II** Infrastructure benefits from a specific preferential treatment under Solvency II. This treatment was introduced in the wake of the European Investment, or “Juncker”, Plan. The Juncker Plan was designed to encourage investment in Europe in key sectors, and in particular infrastructure. For qualifying infrastructure loans and bonds, the solvency capital ratio (SCR) is approximately 30% lower than for corporate bonds and loans with the same rating, and 44% lower than for non-rated corporate bonds and loans.

Collateralised, unrated debt is also treated favourably under Solvency II. The basic position is that if the stressed value of the collateral is worth more than the debt, the SCR Spread can be halved. This is often the case for loans or bonds collateralised by real estate. As aircraft collateral does not diminish the SCR, aircraft loans and bonds need to be rated so that the high recovery rates can be reflected in the ratings and hence in the capital requirements.

**RAROC** The RAROC (risk-adjusted return on capital) is the internal rate of return taking into account the Solvency II regulatory capital, default probabilities and recoveries. In part because the Solvency II treatment is favourable for most real asset debt, and in part because of the high recovery rates, the RAROC for these assets is significantly higher than for sovereign or corporate debt.

For example, a real estate debt with a 5.7 year spread duration has a RAROC of around 1.8% p.a. The average RAROC for Eurozone sovereign debt and investment grade corporate debt of the same duration are, respectively, below 0.8% and below 0.5%<sup>8</sup>. An unrated infrastructure debt, eligible for beneficial SCR treatment, has similar features. Its RAROC is around 1.8% for a spread duration of 7.4, whereas both Eurozone sovereign debt and investment grade corporate debt do not exceed 1%<sup>9</sup>. It is interesting to note that, for aircraft debt, which is issued in USD, the same effect exists, but with a smaller discrepancy between aircraft debt and investment grade corporate debt.

**Natixis Asset Management has been managing real estate debt since 2012, when it set up its first real estate debt fund in collaboration with AEW Europe, the real estate asset manager of the Natixis group. The first fund, Senior European Loan Fund I, raised €323 million of capital and the second debt fund was launched earlier this year.**

**A team of 4 experienced portfolio managers specialised in structuring and negotiating real estate, infrastructure and aircraft debt recently joined Natixis Asset Management in order to set up the Private Debt Real Asset team.**

<sup>7</sup> For a more detailed discussion, see « [Solvency II for Real Asset Debt: Specificities of Real Asset Debt under Solvency II](#) » dated 20 September 2016

<sup>8</sup> Figures as of 21 November 2016

<sup>9</sup> Figures as of 21 November 2016

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