

Private assets & cashflow driven investing

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Understanding the challenges and tailoring your approach Institutional Money Kongress 2019

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Agenda

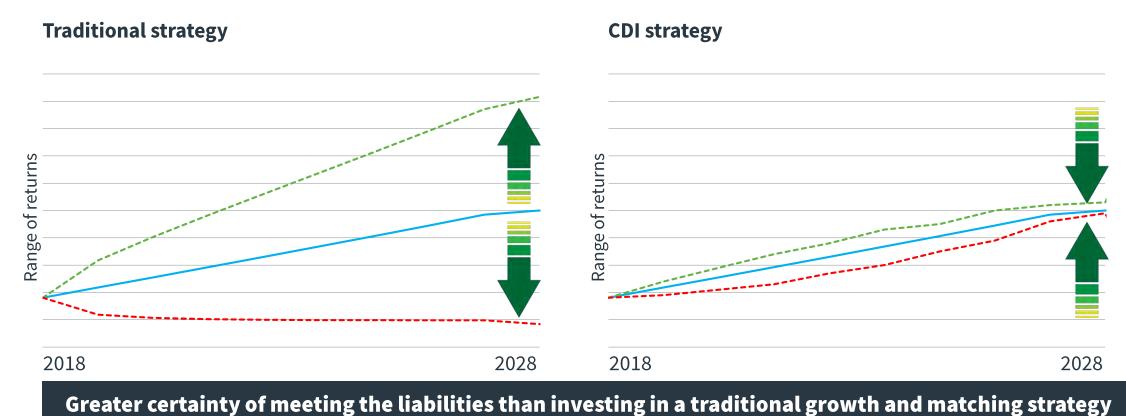
Cashflow Driven Investing (CDI) – what is it and why use it?

How best to incorporate private assets into a CDI strategy to achieve the most out of today's opportunities?

What are the challenges of implementing a CDI strategy?

Overview of Cashflow Driven Investment

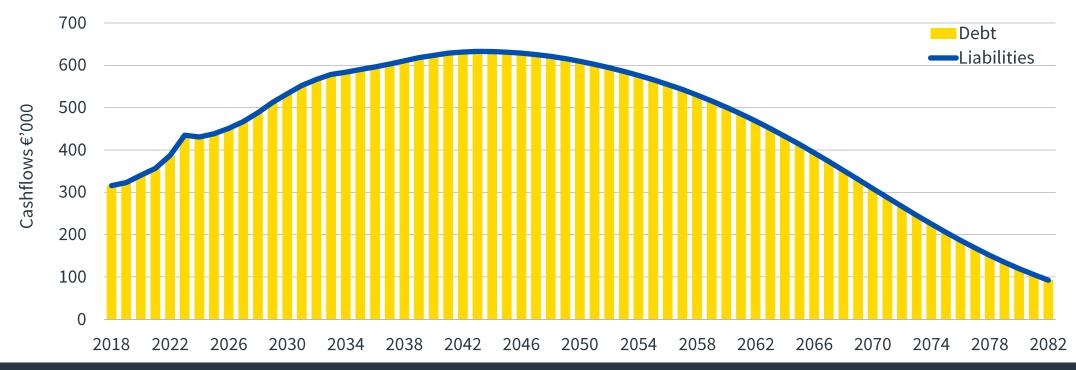
Why do it



Source: Aviva Investors for illustration purposes only

Cashflow driven investing strategy

What does it look like?



CDI = A portfolio of debt and debt-like assets that match all liability cashflows as they fall due (after allowing for defaults, fees and other running costs)

Source: Aviva Investors for illustration purposes only

Private assets

An alternative source of income

	Infrastructure Debt
	Real Estate Finance
	Private Corporate Debt
	Structured Finance
A	Infrastructure Equity
	Long Income Real Estate
	Predictable, stable and reliable source of income

Why private assets?

Benefits of income focused real asset portfolio

Enhanced yield



2 Downside protection

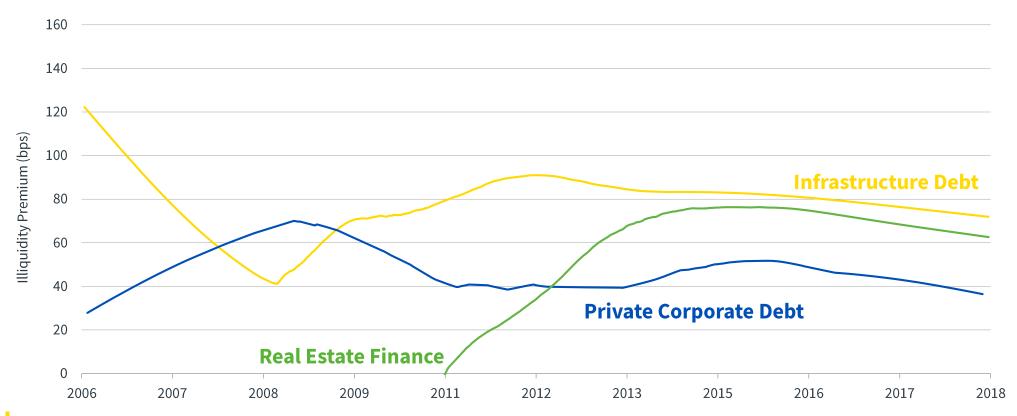


3 Diversification



Enhanced yield through illiquidity premia

Trends in illiquidity premia (2006 – 2018)

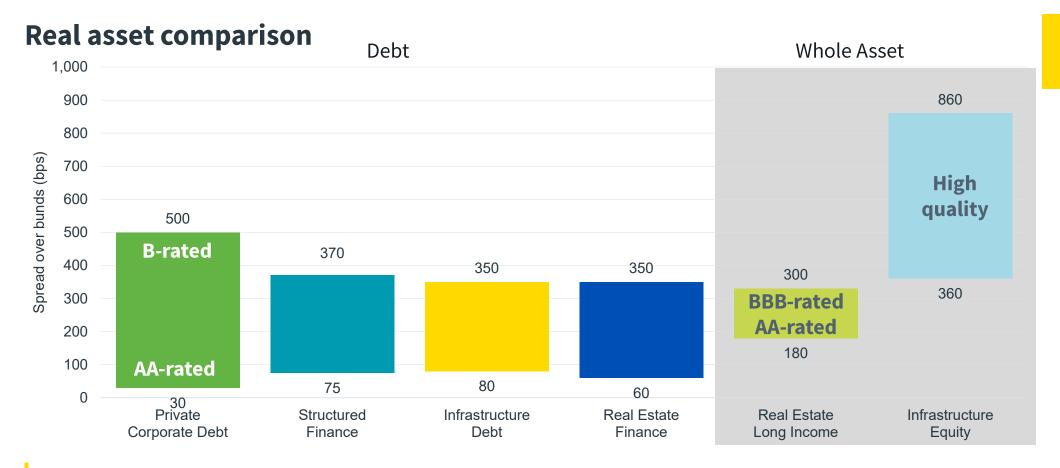


Past performance is not a guide to the future.

Source: Aviva Investors as at 31 December 2018. For illustrative purposes only. The value of an investment can go down as well as up and there is no guarantee that the forecast returns will be achieved.

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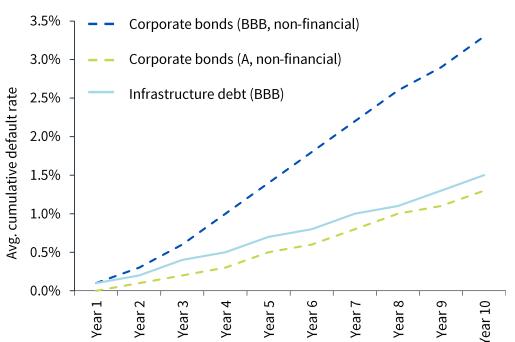
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Source: Aviva Investors internal estimates 31 December 2018. Returns illustrated are not guaranteed and may not be achieved. All spreads are gross of fees / other expenses or default assumptions.

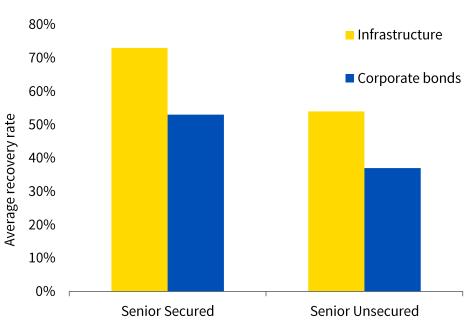
Downside protection

Lower expected loss than corporate bonds

Lower defaults



Higher recovery rates



Past performance is not a guide to the future.

Source: Moody's - Infrastructure Default and Recovery Rates 1983 - 2016, July 2017. For illustration purposes only.

3

Diversification

Public vs private debt









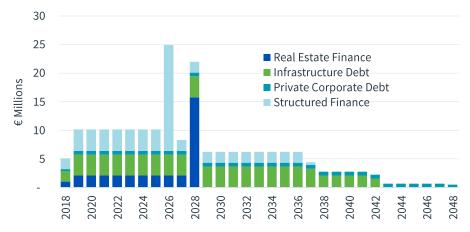


Conventional strategy

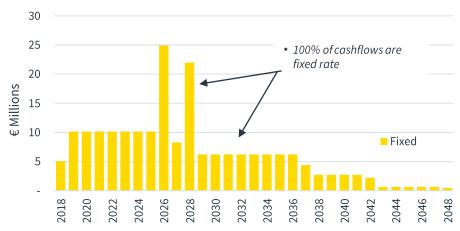
Uses only private debt, invests in BBB- or higher, mostly fixed

Model portfolio	Allocation (€m)	Allocation (%)	Average Rating	Gross Bund Spread (bps pa)	Illiquidity Premium (bps pa)	Duration (yrs)
Real Estate Finance	35	17.5%	A-	245	108	6.5
Infrastructure Debt	80	40.0%	BBB-	181	37	13.0
Private Corporate Debt	20	10.0%	AA	110	20	14.5
Structured Finance	65	32.5%	А	195	55	8.8
Total/Average	200	100.0%	BBB+	190	53	10.7

Annual cashflow projections by asset class



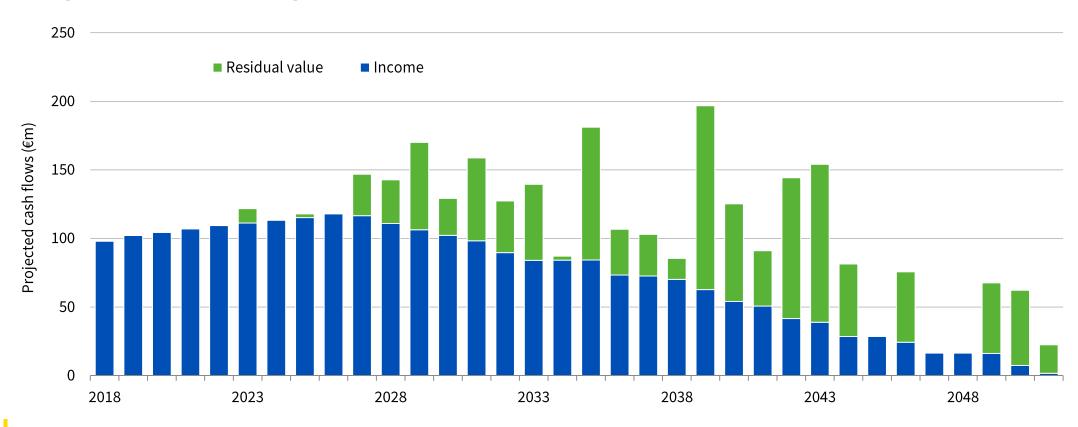
Annual cashflow projections by type



Source: Aviva Investors internal estimates as at 10 September 2018. Returns illustrated are not guaranteed and may not be achieved.

Going beyond private debt (1/2)

Using property for long dated income



Source: Aviva Investors as at 30 September 2018. All information is based on internal forecasts and estimates of Aviva Investors and should not be relied upon as indicating any guarantee of return

Alternative approach

Going beyond private debt (2/2)

Unleveraged infrastructure as additional source of stable cash flows

Debt: IRR* of 3%-5%Secured on physical assets /

Can be complex

contracts

approaches

Traditional

Cash flows stable / secure

Equity: IRR* of 8%-12%+

- Leveraged exposure
- Participation in upside / bear the primary risk
- Volatile cash flows NOT SUITABLE FOR CDI



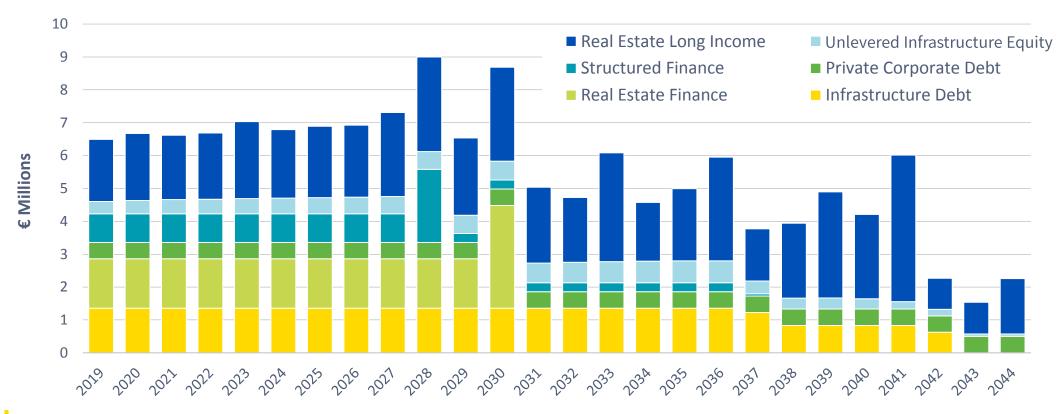
Unlevered: IRR* of 5%-10%

- Buy the whole project, full control of the asset
- No financial volatility from leverage
- Flexible structures
- Simpler authorisation process
- Can provide stable / secure cash flows
- Significant yield pick-up over debt

Source: Aviva Investors. For illustrative purpose only, *IRR = Internal Rate of Return

Putting it all together

Private assets cashflow profile



Source: Aviva Investors as at 30 September 2018. For illustrative purposes only.

What are the pitfalls?

Investment considerations

Lack of liquidity

Point in cycle

Leverage levels

Covenants

Security

Illiquidity premium

Operational considerations

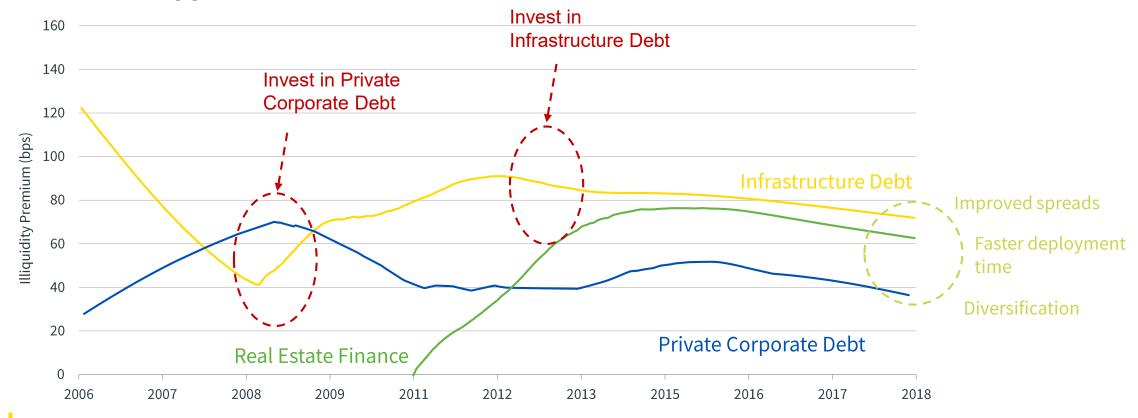
Regulation (solvency II, local regulation)

Investment licenses

Risk management & monitoring framework

Tailoring of CDI portfolio to your needs

Multi-asset approach



Past performance is not a guide to the future.

Source: Aviva Investors as at 30 December 2018. For illustrative purposes only. The value of an investment can go down as well as up and there is no guarantee that the forecast returns will be achieved.

Summary

Why CDI?

- Increased certainty of outcome
- Predictable, stable and reliable source of income



How best to incorporate private assets into CDI?

- Utilise multi-asset approach
- Exploit wide range of CDI assets to tailor to your scheme's specificities



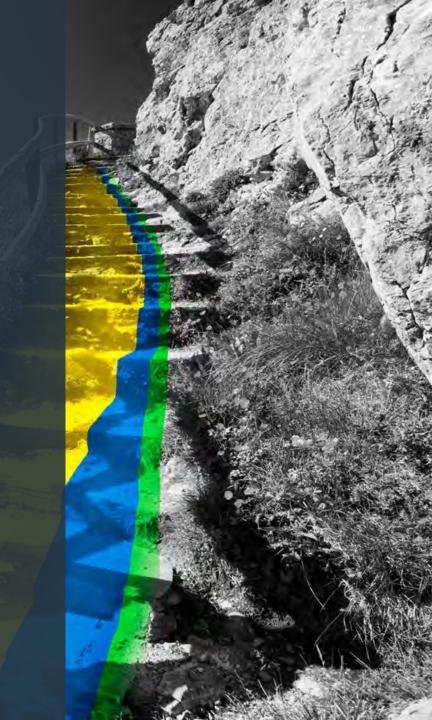
What are the challenges?

- Both investment and operational considerations
- Challenges can be managed by specialist practitioners





Appendix



Senior Secured Loan

Private Corporate Debt Deal Example

Investment Overview

- EUR 8.5m secondary market participation in a EUR 320m senior secured, syndicated Leveraged Buy-Out loan
- A leading European manufacturer (c.EUR 65.9 EBITDA³) of ready-to-bake dough and ready-toheat pancakes through private labels and own brands.
- The company has a key presence in France, Italy, the Netherlands and Germany, and a strong position in the UK and in North America
- Revenue is generated through private label (80%), branded products (10%), co-manufacturing
 (8%) and food service (2%)



For illustration purposes only

Investment	Senior Secured Loan
Borrower	Private Equity Sponsor
Investment size	€8.5m (c. £7.35m)
Tenor	6.75 years
Annualised all-in return	3M Euribor + 350bps
Illiquidity Premium ²	70bps
Rating	B+
Loan terms	Interest Only
Completion date	January 2018

Source: Aviva Investors 30 June 2017. The value of an investment in the fund can go down as well as up and there is no guarantee that the forecast returns will be achieved. 1. Aviva Investors Internal Credit Rating 2. Euro HY (Senior & Secured) B+ rated Bonds 3. As at March 2017

North West Parisian Suburb Office Financing

Real Estate Finance Deal Example

- Recent, well-maintained office building delivered in 2008 with environmental certifications modernized in 2016 and 2017
- Good location and connectivity
 - Next to the Metro Line 13 station "Gabriel Péri" and several buses stops
 - Good road access with proximity of A86, D7 and D17
 - Only one stop from future connection with the new Grand Paris Metro line 15which improve the connectivity and the attractiveness of the area
- Good office facilities and services including a staff restaurant
- Good divisibility floor by floor allowing for multi tenancy
- Transitional office building with 31% occupancy with on-going discussions for 3'000m²
- Recent and numerous letting and sale comparables supporting the borrower business plan
- Mix of 4 industrial tenants
- Experienced sponsor and specialized asset management team
- Conservative business plan in terms of rental values and rent free periods



For illustration purposes only

Location	France
Property	Office, North West of Paris
Valuation	€72,9m
Loan Amount (drawn)	€53m (€47m)
Initial Maturity	4 years
Actual Loan Margin	2,40%
Amortization	Bullet
Investment Size / Date	€18,5m / June 2018

Source: Aviva Investors 11th April 2018 The target return figures which are illustrated as gross of fees are based on the internal forecasts of Aviva Investors and should not be relied upon as indicating any guarantee of return. The value of an investment in the strategy can go down as well as up and there is no guarantee that the forecast returns will be achieved.

Insured Trade Finance

Structured Finance Deal Example

Investment Overview

- Participation in a USD \$50m senior-secured note programme, financing the payment of invoices to suppliers of medical equipment to a Middle Eastern private healthcare operator
- The borrower will use the note programme to pay suppliers immediately, and suppliers in turn offer a discount on the invoice amount for timely payment. The programme is similar to a working capital facility which the borrower recycles for short-term liquidity;
- The notes will be supported by a full, irrevocable, and non-transferable parent guarantee from the borrowers listed parent company.



For illustration purposes only

Investment	Project Mercury
Borrower	Confidential
Investment size	\$50m (c. €40.5m)
Tenor	5 years
Annualised all-in return	EUR 3ML + 200bps
Illiquidity Premium ²	85bps
Rating ¹	BBB+
Loan terms	Interest Only
Completion date	March 2018

Source: Aviva Investors 31 March 2018. The value of an investment in the fund can go down as well as up and there is no guarantee that the forecast returns will be achieved.

1. Aviva Investors Internal Credit Rating

2. The BofA Merrill Lynch GBP BBB 5-7yr Corporate Index OAS as at 13/03/2018

Denmark/Faroe Islands subsea road tunnels

Infrastructure Debt Deal Example

- The longest 2 road subsea tunnels in the Faroes
- Essential infrastructure for transport in the Faroe islands
- Very experienced and large construction company
- High internal project liquidity (high trapped cash reserves)
- Revenue backed by Government guarantee during operations
- Aviva Investors sole European financial institution selected to be part of the refinancing alongside US institutional investors
- Comprehensive covenant package
- Amortising loan structure



For illustration purposes only

Location	Faroe Islands, Denmark
Assets	2 subsea road tunnels
Title	Senior secured loan
Rating	A-
Tenor	24 years
Investment size	€57m
Yield	2.5%-3%

Source: Aviva Investors 31st December 2016

Danone Innovation Centre

Long-Lease Deal Example



Utrecht, Netherlands
Research Facility
International Blue Chip Corporate
BBB+
15 years
100% CPI
5.4% p.a.
€70-75m

- **Rationale:** Danone Innovation Centre is a grade A research and office facility for Danone's special nutrition business "Nutricia" on a 15 year lease with a 5-year extension option.
- **Building:** Grade A office building with BREEAM "Excellent" certificate. Built in 2013 offering 17,926 sqm including office space, laboratories, conference centre and a restaurant. Optionality to convert back to 100% office use.
- **Location**: Excellent location within the Utrecht Science Park, which is a "brain hub" around one of Europe's leading research Universities.



Source: Aviva Investors, September 2018

Key Risks

Past performance is not a guide to future performance.

The value of an investment and any income from it may go down as well as up and the investor may not get back the original amount invested.

Where funds are invested in illiquid private assets, investors may not be able to redeem any units in the fund when they want because illiquid private assets may not always be readily saleable. If this is the case we may defer a request to redeem units.

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Where funds are invested in real estate/infrastructure, investors may not be able to switch or cash in an investment when they want because real estate/infrastructure may not always be readily saleable. If this is the case we may defer a request to switch or cash in units. Investors should also bear in mind that the valuation of real estate is generally a matter of valuers' opinion rather than fact.

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