Derivatives in pension fund management

December 2016

La Caisse is one of the world's largest institutional investors

- **Founded in July 1965**
- **40 clients**
- **Net assets of $255 B as at June 30, 2016**
- **One of the world's 10 largest real estate asset managers**
- **Offices and investments worldwide**
- **90% of assets managed in-house / 10% external**
- **AAA credit ratings from DBRS and S&P, Aaa from Moody's**

Investment sectors

- **Equity Markets**
- **Fixed Income**
- **Real Estate**
- **Private Equity**
- **Infrastructure**

International footprint with 9 offices worldwide

Caisse de dépôt et placement du Québec

Our investment approach

Invest in the **real economy**	Invest for the **long term**	Focus on **quality assets**	Create value through **operations**

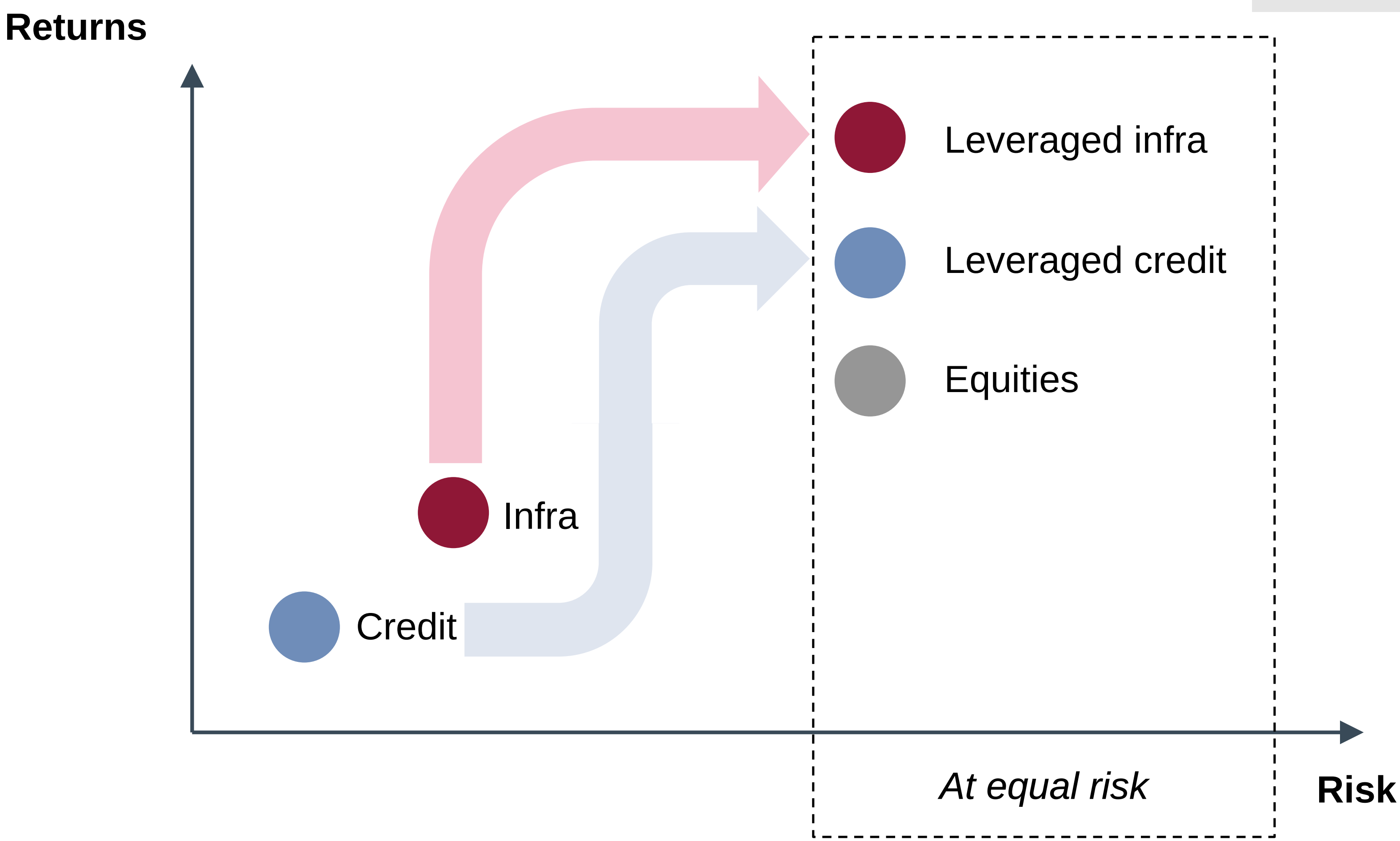
... as part of a rigorous portfolio construction strategy

Pension funds use derivatives in four main areas

	Examples
I **Leverage & liquidity management**	• Implicit leverage on futures • Bonds repos
II **Asset allocation**	• Rebalancing • Easier comparison between asset classes
III **Absolute returns**	• Arbitrage / long-short • Directional positions
IV **Risk hedging**	• Liability-driven investment strategies (LDI) • Currency exposure

Derivatives facilitates comparison between asset classes

Illustration



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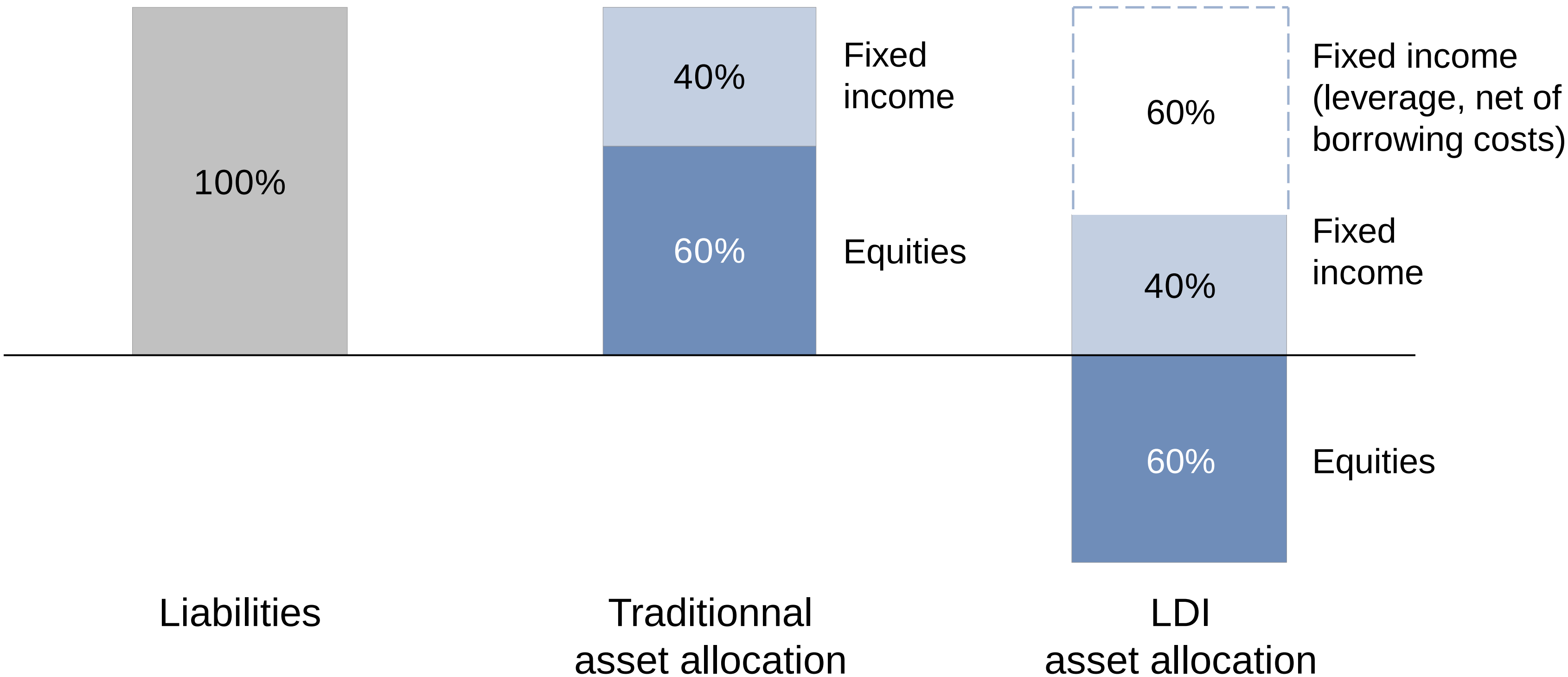
In LDI, leverage is used to fully cover liabilities

Illustration



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Use of derivatives at la Caisse

	Global Portfolio	Fixed Income	Public Equities	Illiquid Assets
I Leverage & liquidity management	✓	✓		
II Asset allocation	✓		✓	
III Absolute returns	✓	✓		
IV Risk hedging	✓	✓	✓	✓

Derivatives pose some challenges for pension funds

Governance

Difficult to create a framework to control the use of derivatives

Bad reputation of derivatives affect current decision making

- Experience with ABCPs still fresh in people's mind

Transparency

Reported leverage is underestimated

- Implicit leverage tied to derivatives is not included

Net exposure is not shared

- Only notional amounts are reported

Expertise

Complex instruments and strategies sometimes misperceived / misunderstood

Risk management

Challenge for risk management teams

- Time / resources required to build models
- Lack of historical data

Implications for liquidity management

- E.g., margin call

Questions?